

PHASE II ENVIRONMENTAL BASELINE SURVEY OF McCORMICK RANCH, KIRTLAND AIR FORCE BASE, NEW MEXICO

Part 4 of 5

Grace Hagaraty
Jeff Johnson
Pete Middlebrooks

GRAM, Inc
8500 Menaul Blvd NE
Albuquerque, NM 87112

31 January 1996

Final Report

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PHILLIPS LABORATORY
Support Directorate
AIR FORCE MATERIEL COMMAND
KIRTLAND AIR FORCE BASE, NM 87117-5776

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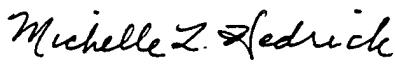
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CARLA J. DOGGETT
Project Manager

FOR THE COMMANDER



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Chief, Safety & Environmental
Office



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Director, Support Directorate

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|--|--------------------------------|--|--|--------------------------|--|
| 1. Report Date (dd-mm-yy) 31 January 1996 | 2. Report Type Final Report | 3. Dates covered (from... to) Oct 93 - Jan 95 | | | |
| 4. Title & subtitle Phase II Environmental Baseline Survey of McCormick Ranch, Kirtland AFB, NM , Part 4 of 5 | | 5a. Contract or Grant # F29601-93-C-0219 | | | |
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| 6. Author(s) Grace Hagaraty, GRAM, Inc. Jeff Johnson, GRAM, Inc. Pete Middlebrooks, LATA | | 5c. Project # 9993 | | | |
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| | | 5e. Work Unit # SE | | | |
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| 9. Sponsoring/Monitoring Agency Name & Address Phillips Laboratory 3550 Aberdeen Avenue, SE Kirtland AFB, NM 87117-5776 | | 10. Monitor Acronym SE | | | |
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| 12. Distribution/Availability Statement Approved for Public Release; Distribution is Unlimited | | | | | |
| 13. Supplementary Notes Work done in association with Los Alamos Technical Associates | | | | | |
| 14. Abstract The Phase II EBS results document the extent of environmental contamination believed to be present on McCormick Ranch. Explosive test areas having the greatest potential for containing soil contaminants were identified using the following geophysical survey methods: EM 31 terrain conductivity meter, magnetometer/gradiometer, and ground penetrating radar. From the geophysical surveys five areas were selected to conduct further environmental analysis. A total of 310 soil samples were collected from the five areas and 13 specific high explosive test sites. The samples were screened for semi-volatile organic compounds, PETN, TNT, TNT-degradation products, nitrates and radioactivity. Laboratory analyses were performed and no explosives or degradation products were identified. Semi-volatile organic compounds were found in 2 samples, manganese was detected in 3 samples, nitrates were discovered below soil action levels and radiation levels were below background. Consequently, it is unlikely that significant contamination exists. | | | | | |
| 15. Subject Terms McCormick Ranch, Environmental Baseline Survey, Contamination | | | | | |
| 16. Report Unclassified | 17. Abstract Unclassified | 18. This Page Unclassified | 19. Limitation of Abstract Unlimited | 20. # of Pages 294 | 21. Responsible Person (Name and Telephone #) Michelle Hedrick 505-846-4574 |



September 30, 1994
QUANterra PROJECT NUMBER: 077428
PO/CONTRACT: 06

Mr. Jeff Johnson
Gram, Inc.
8500 Menual Blvd. NE, #B-370
Albuquerque, New Mexico 87112

Dear Mr. Johnson:

This report contains the analytical results for the ten soil samples which were received under chain of custody by Quanterra West Sacramento on 30 August 1994. These samples are associated with your McCormick Ranch, Kirkland AFB project.

The case narrative is an integral part of this report.

If you have any questions, please call me at (916) 374-4362.

Sincerely,


Diana L. Brooks
Project Manager

kw

Enseco - CAL
2544 Industrial Blvd.
West Sacramento, CA 95691-3435
(916) 372-1393
FAX (916) 372-7768

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 Matrix Specific QC

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Matrix Specific QC

CASE NARRATIVE

QUANTERRA PROJECT NUMBER 077428

General Comments

The temperature blank associated with your samples was recorded as 3.5 deg C. The ambient temperature was 5.3 deg C.

Nitroaromatics and Nitramines by HPLC - Method 8330

The matrix spike/matrix spike duplicate has a tetryl recovery above the control limits. The samples were re-injected and the recoveries were confirmed.

Semivolatile Organics - Method 8270

The laboratory control sample has benzoic acid reported as NA. The actual value recovered (43%) is within the control limits. Noted in the QAPjP, this compound is flagged for a variance.

Due to electronic deliverable limitations, the library search data is available in hardcopy format only.

The method blank 2-Fluorobiphenyl surrogate recovery is above the control limits. Re-injections on different instruments have resulted in similar recoveries. The samples associated with this blank have no positive detections. The initial analysis has been reported.

Metals - Various Methods

The ICAP antimony matrix spike/matrix spike duplicate recoveries are outside of the control limits. Re-analysis of the pair confirm the initial recoveries. The initial analysis was reported.

The matrix spike/matrix spike duplicate for Aluminum, Calcium and Iron have recoveries outside of the control limits due to the element having a sample concentration greater than or equal to 4 times the concentration of the matrix spike.

CASE NARRATIVE - cont.

QUANTERRA PROJECT NUMBER 077428

Metals - Various Methods cont.

The thallium matrix spike/matrix spike duplicate have recoveries below the control limits. The re-analysis yielded recoveries within the control limits. The re-analysis was reported.

Analysis for thallium was performed by graphite furnace in order to achieve detection levels required by the QAPjP.

Inorganics - Various Methods

The Nitrate plus Nitrite laboratory control sample was mis-spiked at 12.5 mg/Kg due to a misinterpretation of the QAPjP.

The matrix spike/matrix spike duplicate recoveries were not calculated due to the sample value being 4 times the concentration of the matrix spike.

There were no other anomalies associated with this report.

QUANTERRA'S QUALITY ASSURANCE PROGRAM

Quanterra has implemented an extensive Quality Assurance (QA) program to ensure the production of scientifically sound, legally defensible data of known documental quality. A key element of this program is Quanterra's Laboratory Control Sample (LCS) system. Controlling lab operations with LCS (as opposed to matrix spike/matrix spike duplicate samples), allows the lab to differentiate between bias as a result of procedural errors versus bias due to matrix effects. The analyst can then identify and implement the appropriate corrective actions at the bench level, without waiting for extensive senior level review or costly and time-consuming sample re-analyses. The LCS program also provides our client with information to assess batch, and overall laboratory performance.

Laboratory Control Samples - (LCS)

Laboratory Control Samples (LCS) are well-characterized, laboratory generated samples used to monitor the laboratory's day-to-day performance of routine analytical methods. The results of the LCS are compared to well-defined laboratory acceptance criteria to determine whether the laboratory system is "in control". Three types of LCS are routinely analyzed: Duplicate Control Samples (DCS), Single Control Samples (SCS), and method blanks. Each of these LCS are described below.

Duplicate Control Samples. A DCS is a well-characterized matrix (blank water, sand, sodium sulfate or celite) which is spiked with certain target parameters and analyzed at approximately 10% of the sample load in order to establish method-specific control limits.

Single Control Samples. An SCS consists of a control matrix that is spiked with surrogate compounds appropriate to the method being used. In cases where no surrogate is available, (e.g. metals or conventional analyses) a single control sample identical to the DCS serves as the control sample. An SCS is prepared for each sample lot. Accuracy is calculated identically to the DCS.

Method Blank Results. A method blank is a laboratory-generated sample which assesses the degree to which laboratory operations and procedures cause false-positive analytical results for your samples.

CHAIN OF CUSTODY

NOTE: MEASURE COOLER TEMPERATURE FROM TEMPERATURE BLANK

| PROJECT NAME: | McCORMICK RANCH | # OF CONTAINERS: | 1 | TYPE OF CONTAINERS: | 1 16-oz glass jar per sample | sample location | |
|-----------------------------|-----------------------------------|--------------------|---------------------|---------------------|------------------------------|-----------------|---|
| CLIENT: | PHILLIPS LABORATORY, KIRTLAND AFB | CONTAINER VOLUME | 16oz | PRESERVATIVE | 4°C | | |
| PRIMARY CONTACT: | JEFF JOHNSON (GRAM) 505-299-1282 | ANALYSES REQUESTED | 1 | | | 5 | 6 |
| SECONDARY CONTACT: | STEVE GORIN (LATA) 505-880-3439 | | 2 | | 3 | 4 | 7 |
| BORATORY CONTACT: | | | | | | | |
| SAMPLE IDENTIFICATION | | MATRIX | DATE/TIME COLLECTED | | | | |
| ID, LOCATION ID, SAMPLE ID) | LD154 - 0081-0001 | 5 | 1/25/94 1230 | ✓ | ✓ | ✓ | ✓ |
| | LD154 - 0084-0001 | 5 | 1/25/94 1207 | ✓ | ✓ | ✓ | ✓ |
| | LD154 - 0084-0002 | 5 | 1/25/94 1207 | ✓ | ✓ | ✓ | ✓ |
| | LD154 - 0271-0001 | 5 | 1/25/94 0915 | ✓ | ✓ | ✓ | ✓ |
| | LD154 - 0284-0001 | 5 | 1/25/94 0820 | ✓ | ✓ | ✓ | ✓ |
| | LD154 - 0284-0002 | 5 | 1/25/94 0820 | ✓ | ✓ | ✓ | ✓ |
| | LD154 - 0151-0001 | 5 | 1/26/94 0800 | ✓ | ✓ | ✓ | ✓ |
| | LD154 - 0157-0001 | 5 | 1/26/94 1130 | ✓ | ✓ | ✓ | ✓ |
| | LD154 - 0160-0001 | 5 | 1/26/94 1213 | ✓ | ✓ | ✓ | ✓ |
| | LD154 - 0161-0001 | 5 | 1/26/94 1235 | ✓ | ✓ | ✓ | ✓ |
| | LD154 - 0165-0001 | 5 | 1/26/94 1340 | ✓ | ✓ | ✓ | ✓ |

CONTAINER TYPES:

P - POLYETHYLENE
JIL -
VATER
CO - CLEAR GLASS
THER -
AQ - AMBER GLASS

E: FOR SOIL SAMPLES ONLY ONE 16-oz GLASS JAR OF SOIL AT
; REQUIRED TO PROVIDE SUFFICIENT SAMPLE VOLUME FOR ALL
LYSES. THE REQUIRED ANALYSES FOR EACH SOIL SAMPLE
IDENTIFIED BY CHECKING THE APPROPRIATE BOXES (1-7)

RELINQUISHED BY:

COMPANY NAME James Deacon SIGNATURE J. Deacon DATE 8/29/94 TIME 1540

RELEASED TO SHIPPER BY:

COMPANY NAME TH SIGNATURE TH DATE 8/29/94 TIME 1540

RECEIVED BY LABORATORY:

COMPANY NAME James Deacon SIGNATURE J. Deacon DATE 8/29/94 TIME 1540

Sample received in good

condition on 8/30/94
accord. to C/121:1
J. Deacon 8/30/94

LABORATORY ANALYSES:

1. EXPLOSIVES (SW8330, SW8330-ADD-1, SW8330-ADD-2)
2. NITRATE + NITRITE (E351.2)
3. SEMI-VOCs (SW8270)
4. ICP METALS (SW6010); MINUS LEAD, ARSENIC, SELENIUM, AND MERCURY
5. MERCURY (SW7471)
6. LEAD (SW7421), ARSENIC (SW7060), SELENIUM (SW7740)
7. CYANIDE (SW9012)

RECEIVED BY:

COMPANY NAME James Deacon SIGNATURE J. Deacon DATE 8/29/94 TIME 1540

RECEIVED BY SHIPPER:

COMPANY NAME TH SIGNATURE TH DATE 8/29/94 TIME 1540

SAMPLE DESCRIPTION INFORMATION
for
Gram, Inc.

| Lab ID | Client ID | | Matrix | Sampled Date | Time | Received Date |
|----------------|-----------|--------------|--------|--------------|-------|---------------|
| 077428-0001-SA | 02760001 | (2.00,6.00,) | SOIL | 24 AUG 94 | 09:15 | 30 AUG 94 |
| 077428-0002-SA | 02840001 | (2.00,6.00,) | SOIL | 25 AUG 94 | 08:20 | 30 AUG 94 |
| 077428-0002-MS | 02840001 | (2.00,6.00,) | SOIL | 25 AUG 94 | 08:20 | 30 AUG 94 |
| 077428-0002-SD | 02840001 | (2.00,6.00,) | SOIL | 25 AUG 94 | 08:20 | 30 AUG 94 |
| 077428-0003-SA | 00810001 | (2.00,6.00,) | SOIL | 25 AUG 94 | 10:30 | 30 AUG 94 |
| 077428-0004-SA | 00840001 | (2.00,6.00,) | SOIL | 25 AUG 94 | 12:07 | 30 AUG 94 |
| 077428-0005-SA | 00840002 | (2.00,6.00,) | SOIL | 25 AUG 94 | 12:07 | 30 AUG 94 |
| 077428-0006-SA | 01510001 | (2.00,6.00,) | SOIL | 26 AUG 94 | 09:00 | 30 AUG 94 |
| 077428-0007-SA | 01570001 | (2.00,6.00,) | SOIL | 26 AUG 94 | 11:00 | 30 AUG 94 |
| 077428-0008-SA | 01600001 | (2.00,6.00,) | SOIL | 26 AUG 94 | 12:13 | 30 AUG 94 |
| 077428-0009-SA | 01610001 | (2.00,6.00,) | SOIL | 26 AUG 94 | 12:35 | 30 AUG 94 |
| 077428-0010-SA | 01650001 | (2.00,6.00,) | SOIL | 26 AUG 94 | 13:40 | 30 AUG 94 |

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Method 8321

Client Name: Gram, Inc.
Client ID: 02760001
Lab ID: 077428-0001-SA
Matrix: SOIL
Authorized: 30 AUG 94

Sampled: 24 AUG 94
Prepared: 02 SEP 94
Received: 30 AUG 94
Analyzed: 07 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|---------------|--------|------------------|--------------------|
| Nitroglycerin | ND | mg/kg | 0.50 |
| PETN | ND | mg/kg | 0.50 |

ND = Not detected
NA = Not applicable

Reported By: Mike Filigenzi

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

Method 8321

Client Name: Gram, Inc.
Client ID: 02840001
Lab ID: 077428-0002-SA
Matrix: SOIL
Authorized: 30 AUG 94

(2.00, 6.00,)
Sampled: 25 AUG 94
Prepared: 02 SEP 94

Received: 30 AUG 94
Analyzed: 07 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|---------------|--------|------------------|--------------------|
| Nitroglycerin | ND | mg/kg | 0.50 |
| PETN | ND | mg/kg | 0.50 |

ND = Not detected
NA = Not applicable

Reported By: Mike Filigenzi

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

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Method 8321

Client Name: Gram, Inc.
Client ID: 00810001
Lab ID: 077428-0003-SA
Matrix: SOIL
Authorized: 30 AUG 94

Sampled: 25 AUG 94
Prepared: 02 SEP 94

Received: 30 AUG 94
Analyzed: 07 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|---------------|--------|------------------|--------------------|
| Nitroglycerin | ND | mg/kg | 0.50 |
| PETN | ND | mg/kg | 0.50 |

ND = Not detected
NA = Not applicable

Reported By: Mike Filigenzi

Approved By: Karla Buechler

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Method 8321

Client Name: Gram, Inc.

Client ID: 00840001 (2.00, 6.00,)

Lab ID: 077428-0004-SA

Matrix: SOIL

Sampled: 25 AUG 94

Received: 30 AUG 94

Authorized: 30 AUG 94

Prepared: 02 SEP 94

Analyzed: 07 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|---------------|--------|------------------|--------------------|
| Nitroglycerin | ND | mg/kg | 0.50 |
| PETN | ND | mg/kg | 0.50 |

ND = Not detected
NA = Not applicable

Reported By: Mike Filigenzi

Approved By: Karla Buechler

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Method 8321

Client Name: Gram, Inc.
Client ID: 00840002
Lab ID: 077428-0005-SA
Matrix: SOIL
Authorized: 30 AUG 94

(2.00, 6.00,)

Sampled: 25 AUG 94
Prepared: 02 SEP 94Received: 30 AUG 94
Analyzed: 07 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|---------------|--------|------------------|--------------------|
| Nitroglycerin | ND | mg/kg | 0.50 |
| PETN | ND | mg/kg | 0.50 |

ND = Not detected
NA = Not applicable

Reported By: Mike Filigenzi

Approved By: Karla Buechler

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Specialty Explosives by HPLC/MS

Enseco
Corning Environmental Services

Method 8321

Client Name: Gram, Inc.

Client ID: 01510001 (2.00, 6.00,)

Lab ID: 077428-0006-SA

Matrix: SOIL

Sampled: 26 AUG 94

Received: 30 AUG 94

Authorized: 30 AUG 94

Prepared: 02 SEP 94

Analyzed: 07 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|---------------|--------|------------------|--------------------|
| Nitroglycerin | ND | mg/kg | 0.50 |
| PETN | ND | mg/kg | 0.50 |

ND = Not detected

NA = Not applicable

Reported By: Mike Filigenzi

Approved By: Karla Buechler

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Method 8321

Client Name: Gram, Inc.

Client ID: 01570001 (2.00, 6.00,)

Lab ID: 077428-0007-SA

Matrix: SOIL

Authorized: 30 AUG 94

Sampled: 26 AUG 94

Prepared: 02 SEP 94

Received: 30 AUG 94

Analyzed: 07 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|---------------|--------|------------------|--------------------|
| Nitroglycerin | ND | mg/kg | 0.50 |
| PETN | ND | mg/kg | 0.50 |

ND = Not detected
NA = Not applicable

Reported By: Mike Filigenzi

Approved By: Karla Buechler

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Specialty Explosives by HPLC/MS

Enseco
Corning Environmental Service

Method 8321

Client Name: Gram, Inc.

Client ID: 01600001 (2.00,6.00,)

Lab ID: 077428-0008-SA

Matrix: SOIL

Authorized: 30 AUG 94

Sampled: 26 AUG 94

Prepared: 02 SEP 94

Received: 30 AUG 94

Analyzed: 07 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|---------------|--------|------------------|--------------------|
| Nitroglycerin | ND | mg/kg | 0.50 |
| PETN | ND | mg/kg | 0.50 |

ND = Not detected
NA = Not applicable

Reported By: Mike Filigenzi

Approved By: Karla Buechler

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Rev 230787

I-16

Method 8321

Client Name: Gram, Inc. Client ID: 01610001 (2.00,6.00,) Lab ID: 077428-0009-SA Matrix: SOIL Sampled: 26 AUG 94 Received: 30 AUG 94 Authorized: 30 AUG 94 Prepared: 02 SEP 94 Analyzed: 07 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|---------------|--------|------------------|--------------------|
| Nitroglycerin | ND | mg/kg | 0.50 |
| PETN | ND | mg/kg | 0.50 |

ND = Not detected
NA = Not applicable

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Specialty Explosives by HPLC/MS

Enseco
Corning Environmental Service

Method 8321

Client Name: Gram, Inc.

Client ID: 01650001 (2.00,6.00,)

Lab ID: 077428-0010-SA

Matrix: SOIL

Authorized: 30 AUG 94

Sampled: 26 AUG 94

Received: 30 AUG 94

Prepared: 02 SEP 94

Analyzed: 07 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|---------------|--------|------------------|--------------------|
| Nitroglycerin | ND | mg/kg | 0.50 |
| PETN | ND | mg/kg | 0.50 |

ND = Not detected
NA = Not applicable

Reported By: Mike Filigenzi

Approved By: Karla Buechler

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QC LOT ASSIGNMENT REPORT
Special Services - LC Mass Spectrometry

| Laboratory Sample Number | QC Matrix | QC Category | QC Lot Number (DCS) | QC Run Number (SCS/BLANK) |
|-----------------------------|-----------|-------------|------------------------|------------------------------|
| 077428-0001-SA | SOIL | 8321-IRP-S | 02 SEP 94-7B | 02 SEP 94-7B |
| 077428-0002-SA | SOIL | 8321-IRP-S | 02 SEP 94-7B | 02 SEP 94-7B |
| 077428-0002-MS | SOIL | 8321-IRP-S | 02 SEP 94-7B | 02 SEP 94-7B |
| 077428-0002-SD | SOIL | 8321-IRP-S | 02 SEP 94-7B | 02 SEP 94-7B |
| 077428-0003-SA | SOIL | 8321-IRP-S | 02 SEP 94-7B | 02 SEP 94-7B |
| 077428-0004-SA | SOIL | 8321-IRP-S | 02 SEP 94-7B | 02 SEP 94-7B |
| 077428-0005-SA | SOIL | 8321-IRP-S | 02 SEP 94-7B | 02 SEP 94-7B |
| 077428-0006-SA | SOIL | 8321-IRP-S | 02 SEP 94-7B | 02 SEP 94-7B |
| 077428-0007-SA | SOIL | 8321-IRP-S | 02 SEP 94-7B | 02 SEP 94-7B |
| 077428-0008-SA | SOIL | 8321-IRP-S | 02 SEP 94-7B | 02 SEP 94-7B |
| 077428-0009-SA | SOIL | 8321-IRP-S | 02 SEP 94-7B | 02 SEP 94-7B |
| 077428-0010-SA | SOIL | 8321-IRP-S | 02 SEP 94-7B | 02 SEP 94-7B |

METHOD BLANK REPORT
Special Services - LC Mass Spectrometry

| Analyte | Result | Units | Reporting Limit |
|--|---------------|--------------|------------------------|
| Test: 8321-IRP-EXP-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 02 SEP 94-7B QC Run: 02 SEP 94-7B | | | |
| Nitroglycerin | ND | mg/kg | 0.50 |
| PETN | ND | mg/kg | 0.50 |
| Test: 8321-IRP-EXP-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 02 SEP 94-7B QC Run: 02 SEP 94-7B | | | |
| Nitroglycerin | ND | mg/kg | 0.50 |
| PETN | ND | mg/kg | 0.50 |
| Test: 8321-IRP-EXP-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 02 SEP 94-7B QC Run: 02 SEP 94-7B | | | |
| Nitroglycerin | ND | mg/kg | 0.50 |
| PETN | ND | mg/kg | 0.50 |
| Test: 8321-IRP-EXP-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 02 SEP 94-7B QC Run: 02 SEP 94-7B | | | |
| Nitroglycerin | ND | mg/kg | 0.50 |
| PETN | ND | mg/kg | 0.50 |

DUPLICATE CONTROL SAMPLE REPORT
Special Services - LC Mass Spectrometry

Enseco
Corning Environmental Services

| Analyte | Concentration | | | Accuracy Average(%) | Precision (RPD) |
|---------|----------------|------------------|-----|------------------------|--------------------|
| | Spiked DCS1 | Measured DCS2 | AVG | | |

Category: 8321-IRP-S

Matrix: SOIL

QC Lot: 02 SEP 94-7B

Concentration Units: mg/kg

| | | | | | | | | |
|---------------|-----|------|------|------|----|--------|----|------|
| Nitroglycerin | 5.0 | 3.67 | 2.86 | 3.27 | 65 | 65-135 | 25 | 35.0 |
| PETN | 2.5 | 2.29 | 1.72 | 2.00 | 80 | 65-135 | 29 | 35.0 |

Calculations are performed before rounding to avoid round-off errors in calculated results.

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MATRIX SPECIFIC QC
ASSIGNMENT REPORT
Special Services - LC Mass Spectrometry

| QC SAMPLE TYPE | TEST | LABORATORY SAMPLE NUMBER | QC LOT |
|------------------------|----------------|-----------------------------|--------------|
| MATRIX SPIKE DUPLICATE | 8321-IRP-EXP-S | 077428-0002-SD | 02 SEP 94-7B |
| MATRIX SPIKE | 8321-IRP-EXP-S | 077428-0002-MS | 02 SEP 94-7B |

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MATRIX SPIKE / MATRIX SPIKE DUPLICATE REPORT
Special Services - LC Mass Spectrometry

| Analyte | Sample | Concentration | | | Spiked MS | %Recovery MS | % MSD | RPD |
|----------------------|--------|-----------------|-----------------|-----|--------------|-----------------|----------|-----|
| | | Matrix Spike | Matrix Spike | Dup | | | | |
| Test: 8321-IRP-EXP-S | | | | | | | | |
| Matrix SOIL | | | | | | | | |
| Sample: 077428-0002 | | | | | | | | |
| Units: mg/kg | | | | | | | | |
| Nitroglycerin | ND | 2.7 | 2.9 | 5.0 | 5.0 | 54 | 58 | 7 |
| PETN | ND | 1.6 | 1.5 | 2.5 | 2.5 | 65 | 61 | 8 |

ND = Not detected.

NC = Not calculated, calculation not applicable.

All calculations are performed before rounding to avoid round-off errors in calculated results.

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Method 8330

Client Name: Gram, Inc.
 Client ID: 02760001
 Lab ID: 077428-0001-SA
 Matrix: SOIL
 Authorized: 30 AUG 94

Sampled: 24 AUG 94 Received: 30 AUG 94
 Prepared: 02 SEP 94 Analyzed: 07 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|-----------------------|--------|------------------|--------------------|
| HMX | ND | mg/kg | 0.25 |
| sym-Trinitrobenzene | ND | mg/kg | 0.25 |
| RDX | ND | mg/kg | 0.25 |
| 1,3-Dinitrobenzene | ND | mg/kg | 0.25 |
| Nitrobenzene | ND | mg/kg | 0.25 |
| 2,4,6-Trinitrotoluene | ND | mg/kg | 0.25 |
| Tetryl | ND | mg/kg | 0.25 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2-Nitrotoluene | ND | mg/kg | 0.25 |
| 3-Nitrotoluene | ND | mg/kg | 0.25 |
| 4-Nitrotoluene | ND | mg/kg | 0.25 |

ND = Not detected
 NA = Not applicable

Reported By: Dennis Gall

Approved By: Karla Buechler

The cover letter is an integral part of this report.
 Rev 230787

I-25

Method 8330

Client Name: Gram, Inc.

Client ID: 02840001 (2.00,6.00,)

Lab ID: 077428-0002-SA

Matrix: SOIL

Authorized: 30 AUG 94

Sampled: 25 AUG 94

Received: 30 AUG 94

Prepared: 02 SEP 94

Analyzed: 07 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|-----------------------|--------|------------------|--------------------|
| HMX | ND | mg/kg | 0.25 |
| sym-Trinitrobenzene | ND | mg/kg | 0.25 |
| RDX | ND | mg/kg | 0.25 |
| 1,3-Dinitrobenzene | ND | mg/kg | 0.25 |
| Nitrobenzene | ND | mg/kg | 0.25 |
| 2,4,6-Trinitrotoluene | ND | mg/kg | 0.25 |
| Tetryl | ND | mg/kg | 0.25 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2-Nitrotoluene | ND | mg/kg | 0.25 |
| 3-Nitrotoluene | ND | mg/kg | 0.25 |
| 4-Nitrotoluene | ND | mg/kg | 0.25 |

ND = Not detected

NA = Not applicable

Reported By: Dennis Gall

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

I-26

Method 8330

Client Name: Gram, Inc.
 Client ID: 00810001 (2.00,6.00,)
 Lab ID: 077428-0003-SA
 Matrix: SOIL
 Authorized: 30 AUG 94

Sampled: 25 AUG 94 Received: 30 AUG 94
 Prepared: 02 SEP 94 Analyzed: 07 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|-----------------------|--------|------------------|--------------------|
| HMX | ND | mg/kg | 0.25 |
| sym-Trinitrobenzene | ND | mg/kg | 0.25 |
| RDX | ND | mg/kg | 0.25 |
| 1,3-Dinitrobenzene | ND | mg/kg | 0.25 |
| Nitrobenzene | ND | mg/kg | 0.25 |
| 2,4,6-Trinitrotoluene | ND | mg/kg | 0.25 |
| Tetryl | ND | mg/kg | 0.25 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2-Nitrotoluene | ND | mg/kg | 0.25 |
| 3-Nitrotoluene | ND | mg/kg | 0.25 |
| 4-Nitrotoluene | ND | mg/kg | 0.25 |

ND = Not detected
 NA = Not applicable

Reported By: Dennis Gall

Approved By: Karla Buechler

The cover letter is an integral part of this report.
 Rev 230787

I-27

Nitroaromatics and Nitramines by HPLC

Enseco
Corning Environmental Service

Method 8330

Client Name: Gram, Inc.

Client ID: 00840001 (2.00, 6.00,)

Lab ID: 077428-0004-SA

Matrix: SOIL

Authorized: 30 AUG 94

Sampled: 25 AUG 94

Received: 30 AUG 94

Prepared: 02 SEP 94

Analyzed: 07 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|-----------------------|--------|------------------|--------------------|
| HMX | ND | mg/kg | 0.25 |
| sym-Trinitrobenzene | ND | mg/kg | 0.25 |
| RDX | ND | mg/kg | 0.25 |
| 1,3-Dinitrobenzene | ND | mg/kg | 0.25 |
| Nitrobenzene | ND | mg/kg | 0.25 |
| 2,4,6-Trinitrotoluene | ND | mg/kg | 0.25 |
| Tetryl | ND | mg/kg | 0.25 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2-Nitrotoluene | ND | mg/kg | 0.25 |
| 3-Nitrotoluene | ND | mg/kg | 0.25 |
| 4-Nitrotoluene | ND | mg/kg | 0.25 |

ND = Not detected

NA = Not applicable

Reported By: Dennis Gall

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

F-28

Method 8330

Client Name: Gram, Inc.
 Client ID: 00840002 (2.00, 6.00,)
 Lab ID: 077428-0005-SA
 Matrix: SOIL Sampled: 25 AUG 94 Received: 30 AUG 94
 Authorized: 30 AUG 94 Prepared: 02 SEP 94 Analyzed: 07 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|-----------------------|--------|------------------|--------------------|
| HMX | ND | mg/kg | 0.25 |
| sym-Trinitrobenzene | ND | mg/kg | 0.25 |
| RDX | ND | mg/kg | 0.25 |
| 1,3-Dinitrobenzene | ND | mg/kg | 0.25 |
| Nitrobenzene | ND | mg/kg | 0.25 |
| 2,4,6-Trinitrotoluene | ND | mg/kg | 0.25 |
| Tetryl | ND | mg/kg | 0.25 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2-Nitrotoluene | ND | mg/kg | 0.25 |
| 3-Nitrotoluene | ND | mg/kg | 0.25 |
| 4-Nitrotoluene | ND | mg/kg | 0.25 |

ND = Not detected
 NA = Not applicable

Reported By: Dennis Gall

Approved By: Karla Buechler

The cover letter is an integral part of this report.
 Rev 230787

I-29

Nitroaromatics and Nitramines by HPLC

Enseco
Corning Environmental Services

Method 8330

Client Name: Gram, Inc.
Client ID: 01510001
Lab ID: 077428-0006-SA
Matrix: SOIL
Authorized: 30 AUG 94

Sampled: 26 AUG 94
Prepared: 02 SEP 94

Received: 30 AUG 94
Analyzed: 07 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|-----------------------|--------|------------------|--------------------|
| HMX | ND | mg/kg | 0.25 |
| sym-Trinitrobenzene | ND | mg/kg | 0.25 |
| RDX | ND | mg/kg | 0.25 |
| 1,3-Dinitrobenzene | ND | mg/kg | 0.25 |
| Nitrobenzene | ND | mg/kg | 0.25 |
| 2,4,6-Trinitrotoluene | ND | mg/kg | 0.25 |
| Tetryl | ND | mg/kg | 0.25 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2-Nitrotoluene | ND | mg/kg | 0.25 |
| 3-Nitrotoluene | ND | mg/kg | 0.25 |
| 4-Nitrotoluene | ND | mg/kg | 0.25 |

ND = Not detected
NA = Not applicable

Reported By: Dennis Gall

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

I - 30

Method 8330

Client Name: Gram, Inc.
 Client ID: 01570001
 Lab ID: 077428-0007-SA
 Matrix: SOIL
 Authorized: 30 AUG 94

Sampled: 26 AUG 94
 Prepared: 02 SEP 94

Received: 30 AUG 94
 Analyzed: 07 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|-----------------------|--------|------------------|--------------------|
| HMX | ND | mg/kg | 0.25 |
| sym-Trinitrobenzene | ND | mg/kg | 0.25 |
| RDX | ND | mg/kg | 0.25 |
| 1,3-Dinitrobenzene | ND | mg/kg | 0.25 |
| Nitrobenzene | ND | mg/kg | 0.25 |
| 2,4,6-Trinitrotoluene | ND | mg/kg | 0.25 |
| Tetryl | ND | mg/kg | 0.25 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2-Nitrotoluene | ND | mg/kg | 0.25 |
| 4-Nitrotoluene | ND | mg/kg | 0.25 |
| 3-Nitrotoluene | ND | mg/kg | 0.25 |

ND = Not detected
 NA = Not applicable

Reported By: Dennis Gall

Approved By: Karla Buechler

The cover letter is an integral part of this report.
 Rev 230787

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Nitroaromatics and Nitramines by HPLC

Enseco
Corning Environmental Service

Method 8330

Client Name: Gram, Inc.
Client ID: 01600001
Lab ID: 077428-0008-SA
Matrix: SOIL
Authorized: 30 AUG 94

Sampled: 26 AUG 94
Prepared: 02 SEP 94

Received: 30 AUG 94
Analyzed: 07 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|-----------------------|--------|---------------|-----------------|
| HMX | ND | mg/kg | 0.25 |
| sym-Trinitrobenzene | ND | mg/kg | 0.25 |
| RDX | ND | mg/kg | 0.25 |
| 1,3-Dinitrobenzene | ND | mg/kg | 0.25 |
| Nitrobenzene | ND | mg/kg | 0.25 |
| 2,4,6-Trinitrotoluene | ND | mg/kg | 0.25 |
| Tetryl | ND | mg/kg | 0.25 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2-Nitrotoluene | ND | mg/kg | 0.25 |
| 4-Nitrotoluene | ND | mg/kg | 0.25 |
| 3-Nitrotoluene | ND | mg/kg | 0.25 |

ND = Not detected
NA = Not applicable

Reported By: Dennis Gall

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

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Method 8330

Client Name: Gram, Inc.
 Client ID: 01610001
 Lab ID: 077428-0009-SA
 Matrix: SOIL
 Authorized: 30 AUG 94

Sampled: 26 AUG 94
 Prepared: 02 SEP 94

Received: 30 AUG 94
 Analyzed: 07 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|-----------------------|--------|------------------|--------------------|
| HMX | ND | mg/kg | 0.25 |
| sym-Trinitrobenzene | ND | mg/kg | 0.25 |
| RDX | ND | mg/kg | 0.25 |
| 1,3-Dinitrobenzene | ND | mg/kg | 0.25 |
| Nitrobenzene | ND | mg/kg | 0.25 |
| 2,4,6-Trinitrotoluene | ND | mg/kg | 0.25 |
| Tetryl | ND | mg/kg | 0.25 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2-Nitrotoluene | ND | mg/kg | 0.25 |
| 4-Nitrotoluene | ND | mg/kg | 0.25 |
| 3-Nitrotoluene | ND | mg/kg | 0.25 |

ND = Not detected
 NA = Not applicable

Reported By: Dennis Gall

Approved By: Karla Buechler

The cover letter is an integral part of this report.
 Rev 230787

I-33

Method 8330

Client Name: Gram, Inc.

Client ID: 01650001 (2.00,6.00,)

Lab ID: 077428-0010-SA

Matrix: SOIL

Authorized: 30 AUG 94

Sampled: 26 AUG 94

Prepared: 02 SEP 94

Received: 30 AUG 94

Analyzed: 07 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|-----------------------|--------|------------------|--------------------|
| HMX | ND | mg/kg | 0.25 |
| sym-Trinitrobenzene | ND | mg/kg | 0.25 |
| RDX | ND | mg/kg | 0.25 |
| 1,3-Dinitrobenzene | ND | mg/kg | 0.25 |
| Nitrobenzene | ND | mg/kg | 0.25 |
| 2,4,6-Trinitrotoluene | ND | mg/kg | 0.25 |
| Tetryl | ND | mg/kg | 0.25 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2-Nitrotoluene | ND | mg/kg | 0.25 |
| 4-Nitrotoluene | ND | mg/kg | 0.25 |
| 3-Nitrotoluene | ND | mg/kg | 0.25 |

ND = Not detected

NA = Not applicable

Reported By: Dennis Gall

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

I-34

QC LOT ASSIGNMENT REPORT
Special Services - LC Mass Spectrometry

| Laboratory Sample Number | QC Matrix | QC Category | QC Lot Number (DCS) | QC Run Number (SCS/BLANK) |
|--------------------------|-----------|-------------|---------------------|---------------------------|
| 077428-0001-SA | SOIL | 8330-IRP-S | 02 SEP 94-7A | 02 SEP 94-7A |
| 077428-0002-SA | SOIL | 8330-IRP-S | 02 SEP 94-7A | 02 SEP 94-7A |
| 077428-0002-MS | SOIL | 8330-IRP-S | 02 SEP 94-7A | 02 SEP 94-7A |
| 077428-0002-SD | SOIL | 8330-IRP-S | 02 SEP 94-7A | 02 SEP 94-7A |
| 077428-0003-SA | SOIL | 8330-IRP-S | 02 SEP 94-7A | 02 SEP 94-7A |
| 077428-0004-SA | SOIL | 8330-IRP-S | 02 SEP 94-7A | 02 SEP 94-7A |
| 077428-0005-SA | SOIL | 8330-IRP-S | 02 SEP 94-7A | 02 SEP 94-7A |
| 077428-0006-SA | SOIL | 8330-IRP-S | 02 SEP 94-7A | 02 SEP 94-7A |
| 077428-0007-SA | SOIL | 8330-IRP-S | 02 SEP 94-7A | 02 SEP 94-7A |
| 077428-0008-SA | SOIL | 8330-IRP-S | 02 SEP 94-7A | 02 SEP 94-7A |
| 077428-0009-SA | SOIL | 8330-IRP-S | 02 SEP 94-7A | 02 SEP 94-7A |
| 077428-0010-SA | SOIL | 8330-IRP-S | 02 SEP 94-7A | 02 SEP 94-7A |

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METHOD BLANK REPORT
Special Services - LC Mass Spectrometry

| Analyte | Result | Units | Reporting Limit |
|---|--------|-------|-----------------|
| Test: 8330-IRP-KAFB-1C-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 02 SEP 94-7A QC Run: 02 SEP 94-7A | | | |
| HMX | ND | mg/kg | 0.25 |
| sym-Trinitrobenzene | ND | mg/kg | 0.25 |
| RDX | ND | mg/kg | 0.25 |
| 1,3-Dinitrobenzene | ND | mg/kg | 0.25 |
| Nitrobenzene | ND | mg/kg | 0.25 |
| 2,4,6-Trinitrotoluene | ND | mg/kg | 0.25 |
| Tetryl | ND | mg/kg | 0.25 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2-Nitrotoluene | ND | mg/kg | 0.25 |
| 3-Nitrotoluene | ND | mg/kg | 0.25 |
| 4-Nitrotoluene | ND | mg/kg | 0.25 |
| Test: 8330-IRP-KAFB-1C-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 02 SEP 94-7A QC Run: 02 SEP 94-7A | | | |
| HMX | ND | mg/kg | 0.25 |
| sym-Trinitrobenzene | ND | mg/kg | 0.25 |
| RDX | ND | mg/kg | 0.25 |
| 1,3-Dinitrobenzene | ND | mg/kg | 0.25 |
| Nitrobenzene | ND | mg/kg | 0.25 |
| 2,4,6-Trinitrotoluene | ND | mg/kg | 0.25 |
| Tetryl | ND | mg/kg | 0.25 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2-Nitrotoluene | ND | mg/kg | 0.25 |
| 3-Nitrotoluene | ND | mg/kg | 0.25 |
| 4-Nitrotoluene | ND | mg/kg | 0.25 |
| Test: 8330-IRP-KAFB-1C-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 02 SEP 94-7A QC Run: 02 SEP 94-7A | | | |
| HMX | ND | mg/kg | 0.25 |
| sym-Trinitrobenzene | ND | mg/kg | 0.25 |
| RDX | ND | mg/kg | 0.25 |
| 1,3-Dinitrobenzene | ND | mg/kg | 0.25 |
| Nitrobenzene | ND | mg/kg | 0.25 |

METHOD BLANK REPORT

Special Services - LC Mass Spectrometry (cont.)

| Analyte | Result | Units | Reporting Limit |
|---|--------|-------|-----------------|
| Test: 8330-IRP-KAFB-1C-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 02 SEP 94-7A QC Run: 02 SEP 94-7A | | | |
| 2,4,6-Trinitrotoluene | ND | mg/kg | 0.25 |
| Tetryl | ND | mg/kg | 0.25 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2-Nitrotoluene | ND | mg/kg | 0.25 |
| 3-Nitrotoluene | ND | mg/kg | 0.25 |
| 4-Nitrotoluene | ND | mg/kg | 0.25 |
| Test: 8330-IRP-KAFB-1C-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 02 SEP 94-7A QC Run: 02 SEP 94-7A | | | |
| HMX | ND | mg/kg | 0.25 |
| sym-Trinitrobenzene | ND | mg/kg | 0.25 |
| RDX | ND | mg/kg | 0.25 |
| 1,3-Dinitrobenzene | ND | mg/kg | 0.25 |
| Nitrobenzene | ND | mg/kg | 0.25 |
| 2,4,6-Trinitrotoluene | ND | mg/kg | 0.25 |
| Tetryl | ND | mg/kg | 0.25 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2-Nitrotoluene | ND | mg/kg | 0.25 |
| 3-Nitrotoluene | ND | mg/kg | 0.25 |
| 4-Nitrotoluene | ND | mg/kg | 0.25 |

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LABORATORY CONTROL SAMPLE REPORT
Special Services - LC Mass Spectrometry

| Analyte | Concentration Spiked | Concentration Measured | Accuracy(%) LCS | Accuracy(%) Limits |
|---|-------------------------|---------------------------|--------------------|-----------------------|
| Category: 8330-IRP-S Explosives by HPLC | | | | |
| Matrix: SOIL | | | | |
| QC Lot: 02 SEP 94-7A | QC Run: 02 SEP 94-7A | | | |
| Concentration Units: mg/kg | | | | |
| HMX | 1.00 | 0.762 | 76 | 75-107 |
| sym-Trinitrobenzene | 1.00 | 0.808 | 81 | 65-135 |
| RDX | 1.00 | 0.765 | 76 | 70-99 |
| 1,3-Dinitrobenzene | 1.00 | 0.748 | 75 | 74-99 |
| Nitrobenzene | 1.00 | 0.713 | 71 | 71-95 |
| 2,4,6-Trinitrotoluene | 1.00 | 0.845 | 84 | 75-107 |
| Tetryl | 1.00 | 1.12 | 112 | 65-135 |
| 2,4-Dinitrotoluene | 1.00 | 0.754 | 75 | 72-106 |
| 2,6-Dinitrotoluene | 1.00 | 0.761 | 76 | 66-102 |
| 2-Am-DNT | 0.00 | NA | NC | 77-101 |
| 4-Am-DNT | 0.00 | NA | NC | 77-108 |
| 2-Nitrotoluene | 1.00 | 0.740 | 74 | 72-97 |
| 4-Nitrotoluene | 1.00 | 0.755 | 76 | 67-110 |
| 3-Nitrotoluene | 1.00 | 0.769 | 77 | 75-104 |

N = Not Applicable

N = Not Calculated, calculation not applicable.

ND = Not Detected

Calculations are performed before rounding to avoid round-off errors in calculated results.

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MATRIX SPECIFIC QC
ASSIGNMENT REPORT
Special Services - LC Mass Spectrometry

| QC SAMPLE TYPE | TEST | LABORATORY SAMPLE NUMBER | QC LOT |
|------------------------|--------------------|-----------------------------|--------------|
| MATRIX SPIKE DUPLICATE | 8330-IRP-KAFB-1C-S | 077428-0002-SD | 02 SEP 94-7A |
| MATRIX SPIKE | 8330-IRP-KAFB-1C-S | 077428-0002-MS | 02 SEP 94-7A |

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MATRIX SPIKE / MATRIX SPIKE DUPLICATE REPORT
Special Services - LC Mass Spectrometry

| Analyte | Sample | Concentration | | | Spiked MS | %Recovery MS | % MSD | % RPD |
|--------------------------|--------|-----------------|-----------------|---------------|--------------|-----------------|----------|----------|
| | | Matrix Spike | Matrix Spike | Matrix Dup | | | | |
| Test: 8330-IRP-KAFB-1C-S | | | | | | | | |
| Matrix SOIL | | | | | | | | |
| Sample: 077428-0002 | | | | | | | | |
| Units: mg/kg | | | | | | | | |
| HMX | ND | 0.78 | 0.84 | 1.0 | 1.0 | 78 | 84 | 8 |
| sym-Trinitrobenzene | ND | 0.83 | 0.92 | 1.0 | 1.0 | 83 | 92 | 11 |
| RDX | ND | 0.73 | 0.79 | 1.0 | 1.0 | 73 | 79 | 8 |
| 1,3-Dinitrobenzene | ND | 0.76 | 0.84 | 1.0 | 1.0 | 76 | 84 | 11 |
| Nitrobenzene | ND | 0.74 | 0.82 | 1.0 | 1.0 | 74 | 82 | 10 |
| 2,4,6-Trinitrotoluene | ND | 0.92 | 1.0 | 1.0 | 1.0 | 92 | 101 | 10 |
| Tetryl | ND | 1.3 | 1.4 | 1.0 | 1.0 | 132 | 145 | 9 |
| 2,4-Dinitrotoluene | ND | 0.79 | 0.87 | 1.0 | 1.0 | 79 | 87 | 9 |
| 2,6-Dinitrotoluene | ND | 0.80 | 0.87 | 1.0 | 1.0 | 80 | 87 | 9 |
| 2-Nitrotoluene | ND | 0.81 | 0.89 | 1.0 | 1.0 | 81 | 89 | 9 |
| 3-Nitrotoluene | ND | 0.79 | 0.87 | 1.0 | 1.0 | 79 | 87 | 10 |
| 4-Nitrotoluene | ND | 0.82 | 0.91 | 1.0 | 1.0 | 82 | 91 | 10 |

ND = Not detected.

NC = Not calculated, calculation not applicable.

All calculations are performed before rounding to avoid round-off errors in calculated results.

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Semivolatile Organics

Enseco
Corning Environmental Services

Method 8270

Client Name: Gram, Inc.
 Client ID: 01570001
 Lab ID: 077428-0007-SA
 Matrix: SOIL
 Authorized: 30 AUG 94

(2.00,6.00,)

Sampled: 26 AUG 94
 Prepared: 07 SEP 94

Received: 30 AUG 94
 Analyzed: 15 SEP 94

| Parameter | Result | Dry Weight Reporting Units | Limit |
|------------------------------|--------|----------------------------|-------|
| Acenaphthene | ND | mg/kg | 0.72 |
| Acenaphthylene | ND | mg/kg | 0.72 |
| Anthracene | ND | mg/kg | 0.72 |
| Benzo(a)anthracene | ND | mg/kg | 0.72 |
| Benzo(a)pyrene | ND | mg/kg | 0.72 |
| Benzo(b)fluoranthene | ND | mg/kg | 0.72 |
| Benzo(g,h,i)perylene | ND | mg/kg | 0.72 |
| Benzo(k)fluoranthene | ND | mg/kg | 0.72 |
| Benzoic acid | ND | mg/kg | 1.7 |
| Benzyl alcohol | ND | mg/kg | 1.3 |
| 4-Bromophenyl phenyl ether | ND | mg/kg | 0.72 |
| Butyl benzyl phthalate | ND | mg/kg | 0.72 |
| 4-Chloroaniline | ND | mg/kg | 1.3 |
| bis(2-Chloroethoxy)- methane | ND | mg/kg | 0.72 |
| 2,2'-Oxybis(1-chloropropane) | ND | mg/kg | 0.72 |
| bis(2-Chloroethyl) ether | ND | mg/kg | 0.72 |
| 4-Chloro-3-methylphenol | ND | mg/kg | 1.3 |
| 2-Chloronaphthalene | ND | mg/kg | 0.72 |
| 2-Chlorophenol | ND | mg/kg | 0.34 |
| 4-Chlorophenyl phenyl ether | ND | mg/kg | 0.72 |
| Chrysene | ND | mg/kg | 0.72 |
| Di-n-butyl phthalate | ND | mg/kg | 0.72 |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.72 |
| Dibenzofuran | ND | mg/kg | 0.72 |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.72 |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.72 |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.72 |
| 3,3'-Dichlorobenzidine | ND | mg/kg | 1.3 |
| 2,4-Dichlorophenol | ND | mg/kg | 0.34 |
| Diethyl phthalate | ND | mg/kg | 0.72 |
| 2,4-Dimethylphenol | ND | mg/kg | 0.34 |
| Dimethyl phthalate | ND | mg/kg | 0.72 |
| 4,6-Dinitro- 2-methylphenol | ND | mg/kg | 3.4 |
| 2,4-Dinitrophenol | ND | mg/kg | 3.4 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.72 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.72 |
| Di-n-octyl phthalate | ND | mg/kg | 0.72 |

(continued on following page)

ND = Not detected
 NA = Not applicable

Reported By: Harlan Loui

Approved By: Steve Rogers

The cover letter is an integral part of this report.

Rev 230787

I-41

Semivolatile Organics**Enseco**
*Corning Environmental Services***Method 8270**

Client Name: Gram, Inc.
Client ID: 01570001
Lab ID: 077428-0007-SA
Matrix: SOIL
Authorized: 30 AUG 94

Sampled: 26 AUG 94
Prepared: 07 SEP 94

Received: 30 AUG 94
Analyzed: 15 SEP 94

| Parameter | Result | Dry Weight Reporting Units | Limit |
|------------------------------|--------|----------------------------|-------|
| bis(2-Ethylhexyl)- phthalate | ND | mg/kg | 0.72 |
| Fluoranthene | ND | mg/kg | 0.72 |
| Fluorene | ND | mg/kg | 0.72 |
| Hexachlorobenzene | ND | mg/kg | 0.72 |
| Hexachlorobutadiene | ND | mg/kg | 0.72 |
| Hexachlorocyclopentadiene | ND | mg/kg | 0.72 |
| Hexachloroethane | ND | mg/kg | 0.72 |
| Indeno(1,2,3-cd)pyrene | ND | mg/kg | 0.72 |
| Isophorone | ND | mg/kg | 0.72 |
| 2-Methylnaphthalene | ND | mg/kg | 0.72 |
| 2-Methylphenol | ND | mg/kg | 0.34 |
| 4-Methylphenol | ND | mg/kg | 0.34 |
| Naphthalene | ND | mg/kg | 0.72 |
| 2-Nitroaniline | ND | mg/kg | 3.4 |
| 3-Nitroaniline | ND | mg/kg | 3.4 |
| 4-Nitroaniline | ND | mg/kg | 3.4 |
| Nitrobenzene | ND | mg/kg | 0.72 |
| 2-Nitrophenol | ND | mg/kg | 0.34 |
| 4-Nitrophenol | ND | mg/kg | 1.7 |
| N-Nitrosodiphenylamine | ND | mg/kg | 0.72 |
| N-Nitroso-di- n-propylamine | ND | mg/kg | 0.72 |
| Pentachlorophenol | ND | mg/kg | 3.4 |
| Phenanthrene | ND | mg/kg | 0.72 |
| Phenol | ND | mg/kg | 0.34 |
| Pyrene | ND | mg/kg | 0.72 |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.72 |
| 2,4,5-Trichlorophenol | ND | mg/kg | 3.4 |
| 2,4,6-Trichlorophenol | ND | mg/kg | 0.34 |
| Surrogate | | Recovery | |
| Nitrobenzene-d5 | 117 | % | |
| 2-Fluorobiphenyl | 106 | % | |
| Terphenyl-d14 | 119 | % | |
| Phenol-d5 | 91 | % | |
| 2-Fluorophenol | 79 | % | |
| 2,4,6-Tribromophenol | 38 | % | |

Percent Moisture is 3%. All results and limits are reported on a dry weight basis.

ND = Not detected
NA = Not applicable

Reported By: Harlan Loui

Approved By: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

I-42

Semivolatiles Library Search (20 Compound ID)

Method 8270

Client Name: Gram, Inc.

Client ID: 01570001 (2.00,6.00,)

Lab ID: 077428-0007-SA

Matrix: SOIL

Sampled: 26 AUG 94

Received: 30 AUG 94

Authorized: 30 AUG 94

Prepared: 07 SEP 94

Analyzed: 15 SEP 94

| Parameter | Result | Units | Reporting Limit |
|--|--------|-------|-----------------|
| Unknown Oxygenated Compound | 690 | ug/Kg | b |
| Unknown Ketone | 1600 | ug/Kg | b |
| Unknown Oxygenated Compound | 510 | ug/Kg | b |
| Unknown Oxygenated Compound | 270 | ug/Kg | |
| Unknown Halogenated Benzene | 490 | ug/kg | |
| Unknown Halogenated Benzene | 180 | ug/kg | |
| Propanoic Acid, 2-Methyl-, 1-(1-Dimethylethyl)-2-methyl- | 730 | ug/Kg | or isomer b |
| Unknown | 600 | ug/Kg | b |
| Unknown | 220 | ug/Kg | |

I-73

Method 8270

Client Name: Gram, Inc.
 Client ID: 01650001
 Lab ID: 077428-0010-SA
 Matrix: SOIL
 Authorized: 30 AUG 94

Sampled: 26 AUG 94
 Prepared: 07 SEP 94

Received: 30 AUG 94
 Analyzed: 15 SEP 94

| Parameter | Result | Dry Weight Reporting Units | Limit |
|------------------------------|--------|----------------------------|-------|
| Acenaphthene | ND | mg/kg | 0.74 |
| Acenaphthylene | ND | mg/kg | 0.74 |
| Anthracene | ND | mg/kg | 0.74 |
| Benzo(a)anthracene | ND | mg/kg | 0.74 |
| Benzo(a)pyrene | ND | mg/kg | 0.74 |
| Benzo(b)fluoranthene | ND | mg/kg | 0.74 |
| Benzo(g,h,i)perylene | ND | mg/kg | 0.74 |
| Benzo(k)fluoranthene | ND | mg/kg | 0.74 |
| Benzoic acid | ND | mg/kg | 1.7 |
| Benzyl alcohol | ND | mg/kg | 1.4 |
| 4-Bromophenyl phenyl ether | ND | mg/kg | 0.74 |
| Butyl benzyl phthalate | ND | mg/kg | 0.74 |
| 4-Chloroaniline | ND | mg/kg | 1.4 |
| 2,2'-Oxybis(1-chloropropane) | ND | mg/kg | 0.74 |
| bis(2-Chloroethoxy)- methane | ND | mg/kg | 0.74 |
| bis(2-Chloroethyl) ether | ND | mg/kg | 0.74 |
| 4-Chloro-3-methylphenol | ND | mg/kg | 1.4 |
| 2-Chloronaphthalene | ND | mg/kg | 0.74 |
| 2-Chlorophenol | ND | mg/kg | 0.35 |
| 4-Chlorophenyl phenyl ether | ND | mg/kg | 0.74 |
| Chrysene | ND | mg/kg | 0.74 |
| Di-n-butyl phthalate | ND | mg/kg | 0.74 |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.74 |
| Dibenzofuran | ND | mg/kg | 0.74 |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.74 |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.74 |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.74 |
| 3,3'-Dichlorobenzidine | ND | mg/kg | 1.4 |
| 2,4-Dichlorophenol | ND | mg/kg | 0.35 |
| Diethyl phthalate | ND | mg/kg | 0.74 |
| 2,4-Dimethylphenol | ND | mg/kg | 0.35 |
| Dimethyl phthalate | ND | mg/kg | 0.74 |
| 4,6-Dinitro- 2-methylphenol | ND | mg/kg | 3.5 |
| 2,4-Dinitrophenol | ND | mg/kg | 3.5 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.74 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.74 |
| Di-n-octyl phthalate | ND | mg/kg | 0.74 |

(continued on following page)

ND = Not detected
 NA = Not applicable

Reported By: Harlan Loui

Approved By: Steve Rogers

The cover letter is an integral part of this report.
 Rev 230787

2-44

Method 8270

Client Name: Gram, Inc.
 Client ID: 01650001
 Lab ID: 077428-0010-SA
 Matrix: SOIL
 Authorized: 30 AUG 94

(2.00,6.00,)

Sampled: 26 AUG 94
 Prepared: 07 SEP 94

Received: 30 AUG 94
 Analyzed: 15 SEP 94

| Parameter | Result | Dry Weight Reporting Units | Limit |
|-----------------------------|--------|----------------------------|-------|
| bis(2-Ethylhexyl)-phthalate | ND | mg/kg | 0.74 |
| Fluoranthene | ND | mg/kg | 0.74 |
| Fluorene | ND | mg/kg | 0.74 |
| Hexachlorobenzene | ND | mg/kg | 0.74 |
| Hexachlorobutadiene | ND | mg/kg | 0.74 |
| Hexachlorocyclopentadiene | ND | mg/kg | 0.74 |
| Hexachloroethane | ND | mg/kg | 0.74 |
| Indeno(1,2,3-cd)pyrene | ND | mg/kg | 0.74 |
| Isophorone | ND | mg/kg | 0.74 |
| 2-Methylnaphthalene | ND | mg/kg | 0.74 |
| 2-Methylphenol | ND | mg/kg | 0.35 |
| 4-Methylphenol | ND | mg/kg | 0.35 |
| Naphthalene | ND | mg/kg | 0.74 |
| 2-Nitroaniline | ND | mg/kg | 3.5 |
| 3-Nitroaniline | ND | mg/kg | 3.5 |
| 4-Nitroaniline | ND | mg/kg | 3.5 |
| Nitrobenzene | ND | mg/kg | 0.74 |
| 2-Nitrophenol | ND | mg/kg | 0.35 |
| 4-Nitrophenol | ND | mg/kg | 1.7 |
| N-Nitrosodiphenylamine | ND | mg/kg | 0.74 |
| N-Nitroso-di-n-propylamine | ND | mg/kg | 0.74 |
| Pentachlorophenol | ND | mg/kg | 3.5 |
| Phenanthrene | ND | mg/kg | 0.74 |
| Phenol | ND | mg/kg | 0.35 |
| Pyrene | ND | mg/kg | 0.74 |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.74 |
| 2,4,5-Trichlorophenol | ND | mg/kg | 3.5 |
| 2,4,6-Trichlorophenol | ND | mg/kg | 0.35 |
| Surrogate | | Recovery | |
| Nitrobenzene-d5 | 103 | % | |
| 2-Fluorobiphenyl | 109 | % | |
| Terphenyl-d14 | 130 | % | |
| Phenol-d5 | 85 | % | |
| 2-Fluorophenol | 48 | % | |
| 2,4,6-Tribromophenol | 26 | % | |

Percent Moisture is 6%. All results and limits are reported on a dry weight basis.

ND = Not detected

NA = Not applicable

Reported By: Harlan Loui

Approved By: Steve Rogers

The cover letter is an integral part of this report.
 Rev 230787

I-45

Semivolatiles Library Search (20 Compound ID)

Method 8270

Client Name: Gram, Inc.

Client ID: 01650001 (2.00,6.00,)

Lab ID: 077428-0010-SA

Matrix: SOIL

Sampled: 26 AUG 94

Received: 30 AUG 94

Authorized: 30 AUG 94

Prepared: 07 SEP 94

Analyzed: 15 SEP 94

| Parameter | Result | Units | Reporting Limit |
|--|--------|-------|-----------------|
| Unknown Oxygenated Compound | 670 | ug/Kg | b |
| Unknown Ketone | 1600 | ug/Kg | b |
| Unknown Oxygenated Compound | 620 | ug/Kg | b |
| Unknown Oxygenated Compound | 440 | ug/Kg | |
| Unknown Halogenated Benzene | 660 | ug/kg | |
| Unknown Halogenated Benzene | 260 | ug/kg | |
| Propanoic Acid, 2-Methyl-, 1-(1-Dimethylethyl)-2-methyl- | 390 | ug/Kg | or isomer b |
| Unknown | 280 | ug/Kg | |
| Unknown alkane | 230 | ug/Kg | |
| Unknown | 140 | ug/Kg | |

F-46

QC LOT ASSIGNMENT REPORT
Semivolatile Organics by GC/MS

| Laboratory Sample Number | QC Matrix | QC Category | QC Lot Number (DCS) | QC Run Number (SCS/BLANK) |
|-----------------------------|-----------|-------------|------------------------|------------------------------|
| 077428-0007-SA | SOIL | 8270-IRPSL | 07 SEP 94-11A | 07 SEP 94-11A |
| 077428-0010-SA | SOIL | 8270-IRPSL | 07 SEP 94-11A | 07 SEP 94-11A |

I-47

METHOD BLANK REPORT
Semivolatile Organics by GC/MS

Enseco
Corning Environmental Service

| Analyte | Result | Units | Reporting Limit |
|---|--------|-------|-----------------|
| Test: 8270-IRPMS-L-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 07 SEP 94-11A QC Run: 07 SEP 94-11A | | | |
| Acenaphthene | ND | mg/kg | 0.70 |
| Acenaphthylene | ND | mg/kg | 0.70 |
| Anthracene | ND | mg/kg | 0.70 |
| Benzo(a)anthracene | ND | mg/kg | 0.70 |
| Benzo(a)pyrene | ND | mg/kg | 0.70 |
| Benzo(b)fluoranthene | ND | mg/kg | 0.70 |
| Benzo(g,h,i)perylene | ND | mg/kg | 0.70 |
| Benzo(k)fluoranthene | ND | mg/kg | 0.70 |
| Benzoic acid | ND | mg/kg | 1.6 |
| Benzyl alcohol | ND | mg/kg | 1.3 |
| 4-Bromophenyl phenyl ether | ND | mg/kg | 0.70 |
| Butyl benzyl phthalate | ND | mg/kg | 0.70 |
| 4-Chloroaniline | ND | mg/kg | 1.3 |
| 2,2'-Oxybis(1-chloropropane) | ND | mg/kg | 0.70 |
| bis(2-Chloroethoxy)-methane | ND | mg/kg | 0.70 |
| bis(2-Chloroethyl) ether | ND | mg/kg | 0.70 |
| 4-Chloro-3-methylphenol | ND | mg/kg | 1.3 |
| 2-Chloronaphthalene | ND | mg/kg | 0.70 |
| 2-Chlorophenol | ND | mg/kg | 0.33 |
| 4-Chlorophenyl phenyl ether | ND | mg/kg | 0.70 |
| Chrysene | ND | mg/kg | 0.70 |
| Di-n-butyl phthalate | ND | mg/kg | 0.70 |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.70 |
| Dibenzofuran | ND | mg/kg | 0.70 |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.70 |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.70 |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.70 |
| 3,3'-Dichlorobenzidine | ND | mg/kg | 1.3 |
| 2,4-Dichlorophenol | ND | mg/kg | 0.33 |
| Diethyl phthalate | ND | mg/kg | 0.70 |
| 2,4-Dimethylphenol | ND | mg/kg | 0.33 |
| Dimethyl phthalate | ND | mg/kg | 0.70 |
| 4,6-Dinitro-2-methylphenol | ND | mg/kg | 3.3 |
| 2,4-Dinitrophenol | ND | mg/kg | 3.3 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.70 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.70 |
| Di-n-octyl phthalate | ND | mg/kg | 0.70 |

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METHOD BLANK REPORT
Semivolatile Organics by GC/MS (cont.)

| Analyte | Result | Units | Reporting Limit |
|---|--------|-------|-----------------|
| Test: 8270-IRPMS-L-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 07 SEP 94-11A QC Run: 07 SEP 94-11A | | | |
| bis(2-Ethylhexyl)- | | | |
| phthalate | ND | mg/kg | 0.70 |
| Fluoranthene | ND | mg/kg | 0.70 |
| Fluorene | ND | mg/kg | 0.70 |
| Hexachlorobenzene | ND | mg/kg | 0.70 |
| Hexachlorobutadiene | ND | mg/kg | 0.70 |
| Hexachlorocyclopentadiene | ND | mg/kg | 0.70 |
| Hexachloroethane | ND | mg/kg | 0.70 |
| Indeno(1,2,3-cd)pyrene | ND | mg/kg | 0.70 |
| Isophorone | ND | mg/kg | 0.70 |
| 2-Methylnaphthalene | ND | mg/kg | 0.70 |
| 2-Methylphenol | ND | mg/kg | 0.33 |
| 4-Methylphenol | ND | mg/kg | 0.33 |
| Naphthalene | ND | mg/kg | 0.70 |
| 2-Nitroaniline | ND | mg/kg | 3.3 |
| 3-Nitroaniline | ND | mg/kg | 3.3 |
| 4-Nitroaniline | ND | mg/kg | 3.3 |
| Nitrobenzene | ND | mg/kg | 0.70 |
| 2-Nitrophenol | ND | mg/kg | 0.33 |
| 4-Nitrophenol | ND | mg/kg | 1.6 |
| N-Nitrosodiphenylamine | ND | mg/kg | 0.70 |
| N-Nitroso-di- | | | |
| n-propylamine | ND | mg/kg | 0.70 |
| Pentachlorophenol | ND | mg/kg | 3.3 |
| Phenanthrene | ND | mg/kg | 0.70 |
| Phenol | ND | mg/kg | 0.33 |
| Pyrene | ND | mg/kg | 0.70 |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.70 |
| 2,4,5-Trichlorophenol | ND | mg/kg | 3.3 |
| 2,4,6-Trichlorophenol | ND | mg/kg | 0.33 |

I-49

Semivolatiles Library Search (20 Compound ID)

Method 8270

Client Name: Gram, Inc.

Client ID: SBLK7 07SEP94-11A

Lab ID: Method Blank

Matrix: SOIL

Sampled: 26 AUG 94

Received: 30 AUG 94

Authorized: 30 AUG 94

Prepared: 07 SEP 94

Analyzed: 15 SEP 94

| Parameter | Result | Units | Reporting Limit |
|--|--------|-------|-----------------|
| Unknown Oxgenated Compound | 690 | ug/Kg | |
| Unknown Ketone | 820 | ug/Kg | |
| Unknown Oxygenated Compound | 740 | ug/Kg | |
| Propanoic Acid, 2-Methyl-, 1-(1-Dimethylethyl)-2-methyl- | 380 | ug/Kg | or isomer |
| Unknown | 280 | ug/Kg | |

I-50

LABORATORY CONTROL SAMPLE REPORT
Semivolatile Organics by GC/MS

| Analyte | Concentration Spiked | Measured | Accuracy(%) LCS | Accuracy(%) Limits |
|--|-------------------------|----------|--------------------|-----------------------|
| Category: 8270-IRPSL Semivolatile Organics (Contain all compounds for IRPMS Low soil) | | | | |
| Matrix: SOIL | | | | |
| QC Lot: 07 SEP 94-11A QC Run: 07 SEP 94-11A | | | | |
| Concentration Units: mg/kg | | | | |
| Phenol | 6.70 | 6.60 | 99 | 41-123 |
| bis(2-Chloroethyl) ether | 3.30 | 3.80 | 115 | 43-117 |
| 2-Chlorophenol | 6.70 | 6.68 | 100 | 44-116 |
| 1,3-Dichlorobenzene | 3.30 | 3.17 | 96 | 39-106 |
| 1,4-Dichlorobenzene | 3.30 | 3.22 | 98 | 40-106 |
| Benzyl alcohol | 3.30 | 3.64 | 110 | 37-125 |
| 1,2-Dichlorobenzene | 3.30 | 3.32 | 101 | 40-107 |
| 2-Methylphenol | 6.70 | 6.43 | 96 | 44-128 |
| 2,2'-Oxybis(1-chloropropane) | 3.30 | 3.62 | 110 | 38-116 |
| 4-Methylphenol | 6.70 | 6.78 | 101 | 36-138 |
| N-Nitroso-di-n-propylamine | 3.30 | 3.98 | 121 | 43-123 |
| Hexachloroethane | 3.30 | 3.20 | 97 | 39-106 |
| Nitrobenzene | 3.30 | 3.47 | 105 | 35-180 |
| Isophorone | 3.30 | 0.775 | 23 | 20-134 |
| 2-Nitrophenol | 6.70 | 5.68 | 85 | 40-128 |
| 2,4-Dimethylphenol | 6.70 | 6.14 | 92 | 38-127 |
| Benzoic acid | 6.70 | NA | NC | 1-137 |
| bis(2-Chloroethoxy)-methane | 3.30 | 3.57 | 108 | 40-117 |
| 2,4-Dichlorophenol | 6.70 | 6.38 | 95 | 34-129 |
| 1,2,4-Trichlorobenzene | 3.30 | 3.27 | 99 | 36-114 |
| Naphthalene | 3.30 | 3.34 | 101 | 41-108 |
| 4-Chloroaniline | 3.30 | 0.953 | 29 | 0-63 |
| Hexachlorobutadiene | 3.30 | 3.13 | 95 | 33-114 |
| 4-Chloro-3-methylphenol | 6.70 | 6.98 | 104 | 33-143 |
| 2-Methylnaphthalene | 3.30 | 3.39 | 103 | 0-197 |
| Hexachlorocyclopentadiene | 3.30 | 2.82 | 85 | 29-111 |
| 2,4,6-Trichlorophenol | 6.70 | 7.12 | 106 | 41-132 |
| 2,4,5-Trichlorophenol | 6.70 | 4.76 | 71 | 36-129 |
| 2-Chloronaphthalene | 3.30 | 3.35 | 102 | 40-119 |
| 2-Nitroaniline | 3.30 | 3.77 | 114 | 45-129 |
| Dimethyl phthalate | 3.30 | 3.39 | 103 | 48-116 |
| Acenaphthylene | 3.33 | 3.36 | 101 | 43-114 |
| 2,6-Dinitrotoluene | 3.30 | 2.40 | 73 | 44-127 |
| 3-Nitroaniline | 3.30 | 2.72 | 82 | 0-119 |
| Acenaphthene | 3.30 | 3.26 | 99 | 41-113 |
| 2,4-Dinitrophenol | 6.70 | 2.40 | 36 | 0-139 |
| 4-Nitrophenol | 6.70 | 7.64 | 114 | 41-144 |
| Dibenzofuran | 3.30 | 3.41 | 103 | 42-116 |

N = Not Applicable

N = Not Calculated, calculation not applicable.

ND = Not Detected

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE REPORT
Semivolatile Organics by GC/MS

Enseco
Corning Environmental Services

(cont.)

| Analyte | Concentration Spiked | Concentration Measured | Accuracy(%) LCS | (cont.) Limits |
|--|-------------------------|---------------------------|--------------------|-------------------|
| Category: 8270-IRPSL Semivolatile Organics | | | | |
| (Contain all compounds for IRPMS Low soil) | | | | |
| Matrix: SOIL | | | | |
| QC Lot: 07 SEP 94-11A QC Run: 07 SEP 94-11A | | | | |
| Concentration Units: mg/kg | | | | |
| 2,4-Dinitrotoluene | 3.30 | 3.55 | 108 | 43-129 |
| Diethyl phthalate | 3.30 | 3.52 | 107 | 46-118 |
| Fluorene | 3.30 | 3.28 | 99 | 43-117 |
| 4-Chlorophenyl phenyl ether | 3.30 | 3.30 | 100 | 41-120 |
| 4-Nitroaniline | 3.30 | 3.00 | 91 | 0-189 |
| 4,6-Dinitro- 2-methylphenol | 6.70 | 2.69 | 40 | 0-181 |
| N-Nitrosodiphenylamine | 3.30 | 3.65 | 111 | 9-241 |
| 4-Bromophenyl phenyl ether | 3.30 | 3.41 | 103 | 41-126 |
| Hexachlorobenzene | 3.30 | 3.51 | 106 | 40-126 |
| Pentachlorophenol | 6.70 | 4.99 | 74 | 29-137 |
| Phenanthrene | 3.30 | 3.46 | 105 | 54-120 |
| Anthracene | 3.30 | 3.28 | 99 | 46-119 |
| Di-n-butyl phthalate | 3.30 | 3.43 | 104 | 44-130 |
| Fluoranthene | 3.30 | 3.75 | 114 | 44-126 |
| Pyrene | 3.30 | 2.87 | 87 | 52-115 |
| Butyl benzyl phthalate | 3.30 | 3.85 | 117 | 50-131 |
| 3,3'-Dichlorobenzidine | 3.30 | 1.99 | 60 | 7-141 |
| Benzo(a)anthracene | 3.30 | 3.85 | 117 | 48-127 |
| Chrysene | 3.30 | 3.50 | 106 | 49-123 |
| bis(2-Ethylhexyl)- phthalate | 3.30 | 3.81 | 115 | 48-130 |
| Di-n-octyl phthalate | 3.30 | 4.16 | 126 | 44-137 |
| Benzo(b)fluoranthene | 3.30 | 3.80 | 115 | 44-136 |
| Benzo(k)fluoranthene | 3.30 | 3.56 | 108 | 43-127 |
| Benzo(a)pyrene | 3.30 | 3.48 | 105 | 46-132 |
| Indeno(1,2,3-cd)pyrene | 3.30 | 2.43 | 74 | 47-133 |
| Dibenz(a,h)anthracene | 3.30 | 2.31 | 70 | 47-129 |
| Benzo(g,h,i)perylene | 3.30 | 2.08 | 63 | 40-133 |

ND = Not Detected

Calculations are performed before rounding to avoid round-off errors in calculated results.

I-52

SINGLE CONTROL SAMPLE REPORT
Semivolatile Organics by GC/MS

Enseco
Corning Environmental Services

| Analyte | Concentration Spiked | Concentration Measured | Accuracy(%) | SCS | Limits |
|--|-------------------------|---------------------------|-------------|--------|--------|
| Category: 8270-IRPSL | | | | | |
| Matrix: SOIL | | | | | |
| QC Lot: 07 SEP 94-11A QC Run: 07 SEP 94-11A | | | | | |
| Concentration Units: mg/kg | | | | | |
| Nitrobenzene-d5 | 0.33 | 0.37 | 113 | 38-116 | |
| 2-Fluorobiphenyl | 0.33 | 0.39 | 117 | 42-120 | |
| Terphenyl-d14 | 0.33 | 0.39 | 117 | 40-141 | |
| Phenol-d5 | 0.67 | 0.73 | 109 | 32-131 | |
| 2-Fluorophenol | 0.67 | 0.61 | 92 | 23-184 | |
| 2,4,6-Tribromophenol | 0.67 | 0.34 | 50 | 20-109 | |

Calculations are performed before rounding to avoid round-off errors in calculated results.

I-53

I-54

METALS

Enseco
Corning Environmental Services

(Soil/Solid - Total)

Client Name: Gram, Inc.
Client ID: 02760001 (2.00,6.00,)
Lab ID: 077428-0001-SA
Matrix: SOIL
Authorized: 30 AUG 94

Sampled: 24 AUG 94
Prepared: See Below

Received: 30 AUG 94
Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|------------|--------|------------------|-----------------|-------------------|---------------|---------------|
| Aluminum | 6960 | mg/kg | 52.3 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Antimony | ND | mg/kg | 15.7 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Arsenic | 3.3 | mg/kg | 2.6 | 7060 | 02 SEP 94 | 06 SEP 94 |
| Barium | 101 | mg/kg | 10.5 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Beryllium | ND | mg/kg | 1.0 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Cadmium | ND | mg/kg | 0.52 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Calcium | 59200 | mg/kg | 105 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Chromium | 6.8 | mg/kg | 5.2 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Cobalt | ND | mg/kg | 5.2 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Copper | ND | mg/kg | 5.2 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Iron | 6600 | mg/kg | 5.2 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Lead | 4.5 | mg/kg | 0.52 | 7421 | 02 SEP 94 | 03 SEP 94 |
| Magnesium | 2190 | mg/kg | 105 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Manganese | 82.4 | mg/kg | 2.1 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Mercury | ND | mg/kg | 0.10 | 7471 | 07 SEP 94 | 07 SEP 94 |
| Molybdenum | ND | mg/kg | 10.5 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Nickel | ND | mg/kg | 15.7 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Potassium | 1290 | mg/kg | 523 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Selenium | 0.61 | mg/kg | 0.52 | 7740 | 02 SEP 94 | 03 SEP 94 |
| Silver | ND | mg/kg | 5.2 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Sodium | ND | mg/kg | 523 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Thallium | ND | mg/kg | 0.50 | 7841 | 02 SEP 94 | 21 SEP 94 |
| Vanadium | 14.6 | mg/kg | 10.5 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Zinc | 17.2 | mg/kg | 2.1 | 6010 | 02 SEP 94 | 07 SEP 94 |

Percent Moisture is 4%. All results and limits are reported on a dry weight basis.

Note G : Reporting Limit raised due to matrix interference.

Note q : Post-digestion spike recovery fell between 40% and 85%
due to matrix interference.

ND = Not detected

NA = Not applicable

Reported By: Don Carney

Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.
Rev 230787

I-55

METALS

(Soil/Solid - Total)

Client Name: Gram, Inc.
Client ID: 02840001
Lab ID: 077428-0002-SA
Matrix: SOIL
Authorized: 30 AUG 94

Sampled: 25 AUG 94
Prepared: See Below

Received: 30 AUG 94
Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|------------|--------|------------------|-----------------|-------------------|---------------|---------------|
| Aluminum | 8130 | mg/kg | 56.4 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Antimony | ND | mg/kg | 16.9 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Arsenic | 3.4 | mg/kg | 2.8 | 7060 | 02 SEP 94 | 06 SEP 94 |
| Barium | 162 | mg/kg | 11.3 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Beryllium | ND | mg/kg | 1.1 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Cadmium | ND | mg/kg | 0.56 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Calcium | 62900 | mg/kg | 113 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Chromium | 7.8 | mg/kg | 5.6 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Cobalt | ND | mg/kg | 5.6 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Copper | ND | mg/kg | 5.6 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Iron | 7240 | mg/kg | 5.6 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Lead | 5.4 | mg/kg | 0.56 | 7421 | 02 SEP 94 | 03 SEP 94 |
| Magnesium | 2730 | mg/kg | 113 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Manganese | 104 | mg/kg | 2.3 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Mercury | ND | mg/kg | 0.11 | 7471 | 07 SEP 94 | 07 SEP 94 |
| Molybdenum | ND | mg/kg | 11.3 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Nickel | ND | mg/kg | 16.9 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Potassium | 1690 | mg/kg | 564 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Selenium | ND | mg/kg | 0.56 | 7740 | 02 SEP 94 | 03 SEP 94 |
| Silver | ND | mg/kg | 5.6 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Sodium | ND | mg/kg | 564 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Thallium | ND | mg/kg | 0.50 | 7841 | 02 SEP 94 | 21 SEP 94 |
| Vanadium | 15.9 | mg/kg | 11.3 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Zinc | 20.3 | mg/kg | 2.3 | 6010 | 02 SEP 94 | 07 SEP 94 |

Percent Moisture is 11%. All results and limits are reported on a dry weight basis.

Note G : Reporting Limit raised due to matrix interference.

Note q : Post-digestion spike recovery fell between 40% and 85%
due to matrix interference.

ND = Not detected

NA = Not applicable

Reported By: Don Carney

Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.
Rev 230787

F-56

(Soil/Solid - Total)

Client Name: Gram, Inc.
 Client ID: 00810001 (2.00, 6.00,)
 Lab ID: 077428-0003-SA
 Matrix: SOIL
 Authorized: 30 AUG 94

Sampled: 25 AUG 94
 Prepared: See Below

Received: 30 AUG 94
 Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|------------|--------|------------------|-----------------|-------------------|---------------|---------------|
| Aluminum | 15400 | mg/kg | 57.1 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Antimony | ND | mg/kg | 17.1 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Arsenic | 5.0 | mg/kg | 2.9 | 7060 | 02 SEP 94 | 06 SEP 94 |
| Barium | 151 | mg/kg | 11.4 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Beryllium | ND | mg/kg | 1.1 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Cadmium | ND | mg/kg | 0.57 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Calcium | 41300 | mg/kg | 114 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Chromium | 14.3 | mg/kg | 5.7 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Cobalt | ND | mg/kg | 5.7 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Copper | 8.2 | mg/kg | 5.7 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Iron | 12800 | mg/kg | 5.7 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Lead | 11.2 | mg/kg | 1.1 | 7421 | 02 SEP 94 | 03 SEP 94 |
| Magnesium | 4470 | mg/kg | 114 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Manganese | 241 | mg/kg | 2.3 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Mercury | ND | mg/kg | 0.11 | 7471 | 07 SEP 94 | 07 SEP 94 |
| Molybdenum | ND | mg/kg | 11.4 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Nickel | ND | mg/kg | 17.1 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Potassium | 3130 | mg/kg | 571 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Selenium | ND | mg/kg | 0.57 | 7740 | 02 SEP 94 | 03 SEP 94 |
| Silver | ND | mg/kg | 5.7 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Sodium | ND | mg/kg | 57 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Thallium | ND | mg/kg | 0.50 | 7841 | 02 SEP 94 | 21 SEP 94 |
| Vanadium | 24.7 | mg/kg | 11.4 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Zinc | 36.1 | mg/kg | 2.3 | 6010 | 02 SEP 94 | 07 SEP 94 |

Percent Moisture is 12%. All results and limits are reported on a dry weight basis.

Note G : Reporting Limit raised due to matrix interference.

Note R : Raised reporting limit(s) due to high analyte level(s).

Note q : Post-digestion spike recovery fell between 40% and 85%
 due to matrix interference.

ND = Not detected

NA = Not applicable

Reported By: Don Carney

Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.
 Rev 230787

J-57

METALS

Enseco
Corning Environmental Science

(Soil/Solid - Total)

Client Name: Gram, Inc.
 Client ID: 00840001 (2.00, 6.00,)
 Lab ID: 077428-0004-SA
 Matrix: SOIL
 Authorized: 30 AUG 94

Sampled: 25 AUG 94
 Prepared: See Below

Received: 30 AUG 94
 Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|------------|--------|------------------|-----------------|-------------------|---------------|---------------|
| Aluminum | 11700 | mg/kg | 52.8 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Antimony | ND | mg/kg | 15.9 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Arsenic | 4.6 | mg/kg | 0.53 | 7060 | 02 SEP 94 | 06 SEP 94 |
| Barium | 125 | mg/kg | 10.6 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Beryllium | ND | mg/kg | 1.1 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Cadmium | ND | mg/kg | 0.53 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Calcium | 43700 | mg/kg | 106 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Chromium | 10.5 | mg/kg | 5.3 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Cobalt | ND | mg/kg | 5.3 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Copper | 6.5 | mg/kg | 5.3 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Iron | 10900 | mg/kg | 5.3 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Lead | 8.6 | mg/kg | 1.1 | 7421 | 02 SEP 94 | 03 SEP 94 |
| Magnesium | 3790 | mg/kg | 106 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Manganese | 190 | mg/kg | 2.1 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Mercury | ND | mg/kg | 0.11 | 7471 | 07 SEP 94 | 07 SEP 94 |
| Molybdenum | ND | mg/kg | 10.6 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Nickel | ND | mg/kg | 15.9 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Potassium | 2010 | mg/kg | 528 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Selenium | ND | mg/kg | 0.53 | 7740 | 02 SEP 94 | 03 SEP 94 |
| Silver | ND | mg/kg | 5.3 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Sodium | ND | mg/kg | 528 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Thallium | ND | mg/kg | 0.50 | 7841 | 02 SEP 94 | 21 SEP 94 |
| Vanadium | 20.9 | mg/kg | 10.6 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Zinc | 29.0 | mg/kg | 2.1 | 6010 | 02 SEP 94 | 07 SEP 94 |

Percent Moisture is 5%. All results and limits are reported on a dry weight basis.

Note R : Raised reporting limit(s) due to high analyte level(s).

Note q : Post-digestion spike recovery fell between 40% and 85%
 due to matrix interference.

ND = Not detected

NA = Not applicable

Reported By: Don Carney

Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.
 Rev 230787

I-58

METALS

Enseco
Corning Environmental Sci.

(Soil/Solid - Total)

Client Name: Gram, Inc.
 Client ID: 00840002
 Lab ID: 077428-0005-SA
 Matrix: SOIL
 Authorized: 30 AUG 94

Sampled: 25 AUG 94
 Prepared: See Below

Received: 30 AUG 94
 Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|------------|--------|------------------|-----------------|-------------------|---------------|---------------|
| Aluminum | 12900 | mg/kg | 53.0 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Antimony | ND | mg/kg | 15.9 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Arsenic | 4.4 | mg/kg | 0.53 | 7060 | 02 SEP 94 | 06 SEP 94 |
| Barium | 131 | mg/kg | 10.6 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Beryllium | ND | mg/kg | 1.1 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Cadmium | ND | mg/kg | 0.53 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Calcium | 44500 | mg/kg | 106 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Chromium | 11.4 | mg/kg | 5.3 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Cobalt | ND | mg/kg | 5.3 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Copper | 6.5 | mg/kg | 5.3 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Iron | 11500 | mg/kg | 5.3 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Lead | 8.2 | mg/kg | 1.1 | 7421 | 02 SEP 94 | 03 SEP 94 |
| Magnesium | 4040 | mg/kg | 106 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Manganese | 200 | mg/kg | 2.1 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Mercury | ND | mg/kg | 0.11 | 7471 | 07 SEP 94 | 07 SEP 94 |
| Molybdenum | ND | mg/kg | 10.6 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Nickel | ND | mg/kg | 15.9 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Potassium | 2240 | mg/kg | 530 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Selenium | ND | mg/kg | 0.53 | 7740 | 02 SEP 94 | 03 SEP 94 |
| Silver | ND | mg/kg | 5.3 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Sodium | ND | mg/kg | 530 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Thallium | ND | mg/kg | 0.50 | 7841 | 02 SEP 94 | 21 SEP 94 |
| Vanadium | 22.9 | mg/kg | 10.6 | 6010 | 02 SEP 94 | 07 SEP 94 |
| Zinc | 30.3 | mg/kg | 2.1 | 6010 | 02 SEP 94 | 07 SEP 94 |

Percent Moisture is 6%. All results and limits are reported on a dry weight basis.

Note R : Raised reporting limit(s) due to high analyte level(s).

Note q : Post-digestion spike recovery fell between 40% and 85%
 due to matrix interference.

ND = Not detected

NA = Not applicable

Reported By: Don Carney

Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.
 Rev 230787

I-59

QC LOT ASSIGNMENT REPORT
Metals Analysis and Preparation

| Laboratory Sample Number | QC Matrix | QC Category | QC Lot Number (DCS) | QC Run Number (SCS/BLANK) |
|-----------------------------|-----------|-------------|------------------------|------------------------------|
| 077428-0001-SA | SOIL | 7471-IRP-S | 07 SEP 94-C | 07 SEP 94-C |
| 077428-0001-SA | SOIL | 7421-IRP-S | 02 SEP 94-TX | 02 SEP 94-TX |
| 077428-0001-SA | SOIL | 7060-IRP-S | 02 SEP 94-TX | 02 SEP 94-TX |
| 077428-0001-SA | SOIL | 7740-IRP-S | 02 SEP 94-TX | 02 SEP 94-TX |
| 077428-0001-SA | SOIL | ICP-IRP-S | 02 SEP 94-T | 02 SEP 94-T |
| 077428-0001-SA | SOIL | 7841-IRP-S | 02 SEP 94-T | 02 SEP 94-T |
| 077428-0002-SA | SOIL | 7471-IRP-S | 07 SEP 94-C | 07 SEP 94-C |
| 077428-0002-SA | SOIL | 7421-IRP-S | 02 SEP 94-TX | 02 SEP 94-TX |
| 077428-0002-SA | SOIL | 7060-IRP-S | 02 SEP 94-TX | 02 SEP 94-TX |
| 077428-0002-SA | SOIL | 7740-IRP-S | 02 SEP 94-TX | 02 SEP 94-TX |
| 077428-0002-SA | SOIL | ICP-IRP-S | 02 SEP 94-T | 02 SEP 94-T |
| 077428-0002-SA | SOIL | 7841-IRP-S | 02 SEP 94-T | 02 SEP 94-T |
| 077428-0002-MS | SOIL | 7471-IRP-S | 07 SEP 94-C | 07 SEP 94-C |
| 077428-0002-MS | SOIL | 7421-IRP-S | 02 SEP 94-TX | 02 SEP 94-TX |
| 077428-0002-MS | SOIL | 7060-IRP-S | 02 SEP 94-TX | 02 SEP 94-TX |
| 077428-0002-MS | SOIL | 7740-IRP-S | 02 SEP 94-TX | 02 SEP 94-TX |
| 077428-0002-MS | SOIL | ICP-IRP-S | 02 SEP 94-T | 02 SEP 94-T |
| 077428-0002-MS | SOIL | 7841-IRP-S | 02 SEP 94-T | 02 SEP 94-T |
| 077428-0002-SD | SOIL | 7471-IRP-S | 07 SEP 94-C | 07 SEP 94-C |
| 077428-0002-SD | SOIL | 7421-IRP-S | 02 SEP 94-TX | 02 SEP 94-TX |
| 077428-0002-SD | SOIL | 7060-IRP-S | 02 SEP 94-TX | 02 SEP 94-TX |
| 077428-0002-SD | SOIL | 7740-IRP-S | 02 SEP 94-TX | 02 SEP 94-TX |
| 077428-0002-SD | SOIL | ICP-IRP-S | 02 SEP 94-T | 02 SEP 94-T |
| 077428-0002-SD | SOIL | 7841-IRP-S | 02 SEP 94-T | 02 SEP 94-T |
| 077428-0003-SA | SOIL | 7471-IRP-S | 07 SEP 94-C | 07 SEP 94-C |
| 077428-0003-SA | SOIL | 7421-IRP-S | 02 SEP 94-TX | 02 SEP 94-TX |
| 077428-0003-SA | SOIL | 7060-IRP-S | 02 SEP 94-TX | 02 SEP 94-TX |
| 077428-0003-SA | SOIL | 7740-IRP-S | 02 SEP 94-TX | 02 SEP 94-TX |
| 077428-0003-SA | SOIL | ICP-IRP-S | 02 SEP 94-T | 02 SEP 94-T |
| 077428-0003-SA | SOIL | 7841-IRP-S | 02 SEP 94-T | 02 SEP 94-T |
| 077428-0004-SA | SOIL | 7471-IRP-S | 07 SEP 94-C | 07 SEP 94-C |
| 077428-0004-SA | SOIL | 7421-IRP-S | 02 SEP 94-TX | 02 SEP 94-TX |
| 077428-0004-SA | SOIL | 7060-IRP-S | 02 SEP 94-TX | 02 SEP 94-TX |
| 077428-0004-SA | SOIL | 7740-IRP-S | 02 SEP 94-TX | 02 SEP 94-TX |
| 077428-0004-SA | SOIL | ICP-IRP-S | 02 SEP 94-T | 02 SEP 94-T |
| 077428-0004-SA | SOIL | 7841-IRP-S | 02 SEP 94-T | 02 SEP 94-T |
| 077428-0005-SA | SOIL | 7471-IRP-S | 07 SEP 94-C | 07 SEP 94-C |
| 077428-0005-SA | SOIL | 7421-IRP-S | 02 SEP 94-TX | 02 SEP 94-TX |
| 077428-0005-SA | SOIL | 7060-IRP-S | 02 SEP 94-TX | 02 SEP 94-TX |
| 077428-0005-SA | SOIL | 7740-IRP-S | 02 SEP 94-TX | 02 SEP 94-TX |
| 077428-0005-SA | SOIL | ICP-IRP-S | 02 SEP 94-T | 02 SEP 94-T |
| 077428-0005-SA | SOIL | 7841-IRP-S | 02 SEP 94-T | 02 SEP 94-T |

I-60

METHOD BLANK REPORT
Metals Analysis and Preparation

| Analyte | Result | Units | Reporting Limit |
|---|--------|-------|-----------------|
| Test: HG-CVAA-IRP-S Matrix: SOIL QC Lot: 07 SEP 94-C QC Run: 07 SEP 94-C | | | |
| Mercury | ND | mg/kg | 0.10 |
| Test: PB-FAA-IRP-S Matrix: SOIL QC Lot: 02 SEP 94-TX QC Run: 02 SEP 94-TX | | | |
| Lead | ND | mg/kg | 0.50 |
| Test: AS-FAA-IRP-S Matrix: SOIL QC Lot: 02 SEP 94-TX QC Run: 02 SEP 94-TX | | | |
| Arsenic | ND | mg/kg | 0.50 |
| Test: SE-FAA-IRP-S Matrix: SOIL QC Lot: 02 SEP 94-TX QC Run: 02 SEP 94-TX | | | |
| Selenium | ND | mg/kg | 0.50 |
| Test: ICP-IRPMS-S Matrix: SOIL QC Lot: 02 SEP 94-T QC Run: 02 SEP 94-T | | | |
| Aluminum | ND | mg/kg | 50.0 |
| Antimony | ND | mg/kg | 15.0 |
| Barium | ND | mg/kg | 10.0 |
| Beryllium | ND | mg/kg | 1.0 |
| Cadmium | ND | mg/kg | 0.50 |
| Calcium | ND | mg/kg | 100 |
| Chromium | ND | mg/kg | 5.0 |
| Cobalt | ND | mg/kg | 5.0 |
| Copper | ND | mg/kg | 5.0 |
| Iron | ND | mg/kg | 5.0 |
| Magnesium | ND | mg/kg | 100 |
| Manganese | ND | mg/kg | 2.0 |
| Molybdenum | ND | mg/kg | 10.0 |

METHOD BLANK REPORT
Metals Analysis and Preparation (cont.)

| Analyte | Result | Units | Reporting Limit |
|---|--------|-------|-----------------|
| Test: ICP-IRPMS-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 02 SEP 94-T QC Run: 02 SEP 94-T | | | |
| Nickel | ND | mg/kg | 15.0 |
| Potassium | ND | mg/kg | 500 |
| Silver | ND | mg/kg | 5.0 |
| Sodium | ND | mg/kg | 500 |
| Vanadium | ND | mg/kg | 10.0 |
| Zinc | ND | mg/kg | 2.0 |
| Test: TL-FAA-IRP-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 02 SEP 94-T QC Run: 02 SEP 94-T | | | |
| Thallium | ND | mg/kg | 0.50 |
| Test: HG-CVAA-IRP-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 07 SEP 94-C QC Run: 07 SEP 94-C | | | |
| Mercury | ND | mg/kg | 0.10 |
| Test: PB-FAA-IRP-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 02 SEP 94-TX QC Run: 02 SEP 94-TX | | | |
| Lead | ND | mg/kg | 0.50 |
| Test: AS-FAA-IRP-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 02 SEP 94-TX QC Run: 02 SEP 94-TX | | | |
| Arsenic | ND | mg/kg | 0.50 |

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METHOD BLANK REPORT
Metals Analysis and Preparation (cont.)

| Analyte | Result | Units | Reporting Limit |
|---|--------|-------|-----------------|
| Test: SE-FAA-IRP-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 02 SEP 94-T QC Run: 02 SEP 94-T | | | |
| Selenium | ND | mg/kg | 0.50 |
| Test: ICP-IRPMS-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 02 SEP 94-T QC Run: 02 SEP 94-T | | | |
| Aluminum | ND | mg/kg | 50.0 |
| Antimony | ND | mg/kg | 15.0 |
| Barium | ND | mg/kg | 10.0 |
| Beryllium | ND | mg/kg | 1.0 |
| Cadmium | ND | mg/kg | 0.50 |
| Calcium | ND | mg/kg | 100 |
| Chromium | ND | mg/kg | 5.0 |
| Cobalt | ND | mg/kg | 5.0 |
| Copper | ND | mg/kg | 5.0 |
| Iron | ND | mg/kg | 5.0 |
| Magnesium | ND | mg/kg | 100 |
| Manganese | ND | mg/kg | 2.0 |
| Molybdenum | ND | mg/kg | 10.0 |
| Nickel | ND | mg/kg | 15.0 |
| Potassium | ND | mg/kg | 500 |
| Silver | ND | mg/kg | 5.0 |
| Sodium | ND | mg/kg | 500 |
| Vanadium | ND | mg/kg | 10.0 |
| Zinc | ND | mg/kg | 2.0 |
| Test: TL-FAA-IRP-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 02 SEP 94-T QC Run: 02 SEP 94-T | | | |
| Thallium | ND | mg/kg | 0.50 |

LABORATORY CONTROL SAMPLE REPORT
Metals Analysis and Preparation

| Analyte | Concentration Spiked | Measured | Accuracy(%) LCS | Limits |
|---|-------------------------|----------|--------------------|--------|
| Category: 7471-IRP-S Mercury by CVAA STATIC QC LIMITS - DO NOT UPDATE | | | | |
| Matrix: SOIL QC Lot: 07 SEP 94-C QC Run: 07 SEP 94-C Concentration Units: mg/kg | | | | |
| Mercury | 32.0 | 34.5 | 108 | 75-125 |
| Analyte | Concentration Spiked | Measured | Accuracy(%) LCS | Limits |
| Category: 7421-IRP-S Lead, Furnace AA STATIC QC LIMITS - DO NOT UPDATE | | | | |
| Matrix: SOIL QC Lot: 02 SEP 94-TX QC Run: 02 SEP 94-TX Concentration Units: mg/kg | | | | |
| Lead | 50.9 | 58.2 | 114 | 65-135 |
| Analyte | Concentration Spiked | Measured | Accuracy(%) LCS | Limits |
| Category: 7060-IRP-S Arsenic, Furnace AA STATIC QC LIMITS - DO NOT UPDATE | | | | |
| Matrix: SOIL QC Lot: 02 SEP 94-TX QC Run: 02 SEP 94-TX Concentration Units: mg/kg | | | | |
| Arsenic | 72.1 | 78.3 | 109 | 75-125 |
| Analyte | Concentration Spiked | Measured | Accuracy(%) LCS | Limits |
| Category: 7740-IRP-S Selenium, Furnace AA STATIC QC LIMITS - DO NOT UPDATE | | | | |
| Matrix: SOIL QC Lot: 02 SEP 94-TX QC Run: 02 SEP 94-TX Concentration Units: mg/kg | | | | |
| Selenium | 74.2 | 82.2 | 111 | 70-130 |

ND = Not Detected

Calculations are performed before rounding to avoid round-off errors in calculated results.

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LABORATORY CONTROL SAMPLE REPORT
Metals Analysis and Preparation

Enseco
Corning Environmental Services

(cont.)

| Analyte | Concentration Spiked | Concentration Measured | Accuracy(%) LCS | Accuracy(%) Limits |
|---|-------------------------|---------------------------|--------------------|-----------------------|
| Category: ICP-IRP-S ICP Metals | | | | |
| STATIC QC LIMITS - DO NOT UPDATE | | | | |
| Matrix: SOIL | | | | |
| QC Lot: 02 SEP 94-T | QC Run: 02 SEP 94-T | | | |
| Concentration Units: mg/kg | | | | |
| Aluminum | 3650 | 4830 | 132 | 75-140 |
| Antimony | 75.0 | 68.7 | 92 | 50-150 |
| Arsenic | 72.1 | 76.8 | 107 | 75-125 |
| Barium | 64.8 | 71.8 | 111 | 75-125 |
| Beryllium | 26.7 | 30.3 | 114 | 75-125 |
| Calcium | 2330 | 2610 | 112 | 75-125 |
| Cadmium | 61.6 | 66.7 | 108 | 75-125 |
| Chromium | 44.1 | 49.3 | 112 | 75-125 |
| Copper | 78.1 | 84.1 | 108 | 75-125 |
| Cobalt | 177 | 197 | 111 | 75-125 |
| Iron | 7360 | 8710 | 118 | 75-125 |
| Magnesium | 2550 | 2860 | 112 | 75-125 |
| Manganese | 141 | 159 | 113 | 75-125 |
| Molybdenum | 104 | 114 | 109 | 75-125 |
| Potassium | 3310 | 3770 | 114 | 75-125 |
| Lead | 50.9 | 55.9 | 110 | 75-125 |
| Nickel | 110 | 125 | 113 | 75-125 |
| Selenium | 74.2 | 80.4 | 108 | 60-140 |
| Silver | 71.7 | 72.8 | 102 | 75-125 |
| Sodium | 346 | 344 | 99 | 75-125 |
| Thallium | 64.1 | 66.0 | 103 | 75-125 |
| Vanadium | 83.0 | 91.0 | 110 | 75-125 |
| Zinc | 78.2 | 88.6 | 113 | 75-125 |

| Analyte | Concentration Spiked | Concentration Measured | Accuracy(%) LCS | Accuracy(%) Limits |
|--|-------------------------|---------------------------|--------------------|-----------------------|
| Category: 7841-IRP-S Thallium, Furnace AA | | | | |
| STATIC QC LIMITS - DO NOT UPDATE | | | | |
| Matrix: SOIL | | | | |
| QC Lot: 02 SEP 94-T | QC Run: 02 SEP 94-T | | | |
| Concentration Units: mg/kg | | | | |
| Thallium | 64.1 | 63.3 | 99 | 65-135 |

ND = Not Detected

Calculations are performed before rounding to avoid round-off errors in calculated results.

I-65

MATRIX SPECIFIC QC
ASSIGNMENT REPORT
Metals Analysis and Preparation

| QC SAMPLE TYPE | TEST | LABORATORY SAMPLE NUMBER | QC LOT |
|------------------------|---------------|-----------------------------|--------------|
| MATRIX SPIKE DUPLICATE | HG-CVAA-IRP-S | 077428-0002-SD | 07 SEP 94-C |
| MATRIX SPIKE | HG-CVAA-IRP-S | 077428-0002-MS | 07 SEP 94-C |
| MATRIX SPIKE DUPLICATE | PB-FAA-IRP-S | 077428-0002-SD | 02 SEP 94-TX |
| MATRIX SPIKE | PB-FAA-IRP-S | 077428-0002-MS | 02 SEP 94-TX |
| MATRIX SPIKE DUPLICATE | AS-FAA-IRP-S | 077428-0002-SD | 02 SEP 94-TX |
| MATRIX SPIKE | AS-FAA-IRP-S | 077428-0002-MS | 02 SEP 94-TX |
| MATRIX SPIKE DUPLICATE | SE-FAA-IRP-S | 077428-0002-SD | 02 SEP 94-TX |
| MATRIX SPIKE | SE-FAA-IRP-S | 077428-0002-MS | 02 SEP 94-TX |
| MATRIX SPIKE DUPLICATE | ICP-IRPMS-S | 077428-0002-SD | 02 SEP 94-T |
| MATRIX SPIKE | ICP-IRPMS-S | 077428-0002-MS | 02 SEP 94-T |
| MATRIX SPIKE DUPLICATE | TL-FAA-IRP-S | 077428-0002-SD | 02 SEP 94-T |
| MATRIX SPIKE | TL-FAA-IRP-S | 077428-0002-MS | 02 SEP 94-T |

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MATRIX SPECIFIC QC
ASSIGNMENT REPORT
Metals Analysis and Preparation

| QC SAMPLE TYPE | TEST | LABORATORY SAMPLE NUMBER | QC LOT |
|------------------------|---------------|-----------------------------|--------------|
| MATRIX SPIKE DUPLICATE | HG-CVAA-IRP-S | 077428-0002-SD | 07 SEP 94-CX |
| MATRIX SPIKE | HG-CVAA-IRP-S | 077428-0002-MS | 07 SEP 94-CX |
| MATRIX SPIKE DUPLICATE | PB-FAA-IRP-S | 077428-0002-SD | 02 SEP 94-TX |
| MATRIX SPIKE | PB-FAA-IRP-S | 077428-0002-MS | 02 SEP 94-TX |
| MATRIX SPIKE DUPLICATE | AS-FAA-IRP-S | 077428-0002-SD | 02 SEP 94-TX |
| MATRIX SPIKE | AS-FAA-IRP-S | 077428-0002-MS | 02 SEP 94-TX |
| MATRIX SPIKE DUPLICATE | SE-FAA-IRP-S | 077428-0002-SD | 02 SEP 94-TX |
| MATRIX SPIKE | SE-FAA-IRP-S | 077428-0002-MS | 02 SEP 94-TX |
| MATRIX SPIKE DUPLICATE | ICP-IRPMS-S | 077428-0002-SD | 02 SEP 94-T |
| MATRIX SPIKE | ICP-IRPMS-S | 077428-0002-MS | 02 SEP 94-T |
| MATRIX SPIKE DUPLICATE | TL-FAA-IRP-S | 077428-0002-SD | 02 SEP 94-TX |
| MATRIX SPIKE | TL-FAA-IRP-S | 077428-0002-MS | 02 SEP 94-TX |

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MATRIX SPIKE / MATRIX SPIKE DUPLICATE REPORT
Metals Analysis and Preparation

| Analyte | Sample | Concentration | | Spiked MS | %Recovery MS | % MSD | % RPD | | | | | |
|----------------------------|--------|-----------------|---------------------|--------------|-----------------|----------|----------|--|--|--|--|--|
| | | Matrix Spike | Matrix Spike Dup | | | | | | | | | |
| Test: HG-CVAA-IRP-S | | | | | | | | | | | | |
| Matrix SOIL | | | | | | | | | | | | |
| Sample: 077428-0002 | | | | | | | | | | | | |
| Units: mg/kg | | | | | | | | | | | | |
| Mercury | ND | 0.25 | 0.24 | 0.28 | 0.28 | 87 | 87 | | | | | |
| Test: PB-FAA-IRP-S | | | | | | | | | | | | |
| Matrix SOIL | | | | | | | | | | | | |
| Sample: 077428-0002 | | | | | | | | | | | | |
| Units: mg/kg | | | | | | | | | | | | |
| Lead | 5.4 | 7.3 | 7.2 | 2.3 | 2.3 | 81 | 77 | | | | | |
| Test: AS-FAA-IRP-S | | | | | | | | | | | | |
| Matrix SOIL | | | | | | | | | | | | |
| Sample: 077428-0002 | | | | | | | | | | | | |
| Units: mg/kg | | | | | | | | | | | | |
| Arsenic | 3.4 | 8.0 | 7.6 | 4.5 | 4.5 | 102 | 95 | | | | | |
| Test: SE-FAA-IRP-S | | | | | | | | | | | | |
| Matrix SOIL | | | | | | | | | | | | |
| Sample: 077428-0002 | | | | | | | | | | | | |
| Units: mg/kg | | | | | | | | | | | | |
| Selenium | ND | 2.4 | 2.5 | 2.3 | 2.3 | 106 | 112 | | | | | |
| Test: ICP-IRPMS-S | | | | | | | | | | | | |
| Matrix SOIL | | | | | | | | | | | | |
| Sample: 077428-0002 | | | | | | | | | | | | |
| Units: mg/kg | | | | | | | | | | | | |
| Aluminum | 8130 | 10600 | 11000 | 225 | 225 | 1113 | 1293 | | | | | |
| Antimony | ND | 24.3 | 23.8 | 56.4 | 56.4 | 43 | 42 | | | | | |
| Barium | 162 | 353 | 360 | 225 | 225 | 85 | 88 | | | | | |
| Beryllium | ND | 5.8 | 5.7 | 5.6 | 5.6 | 103 | 101 | | | | | |
| Cadmium | ND | 5.0 | 4.8 | 5.6 | 5.6 | 89 | 86 | | | | | |
| Calcium | 62900 | 65200 | 65200 | 11300 | 11300 | 20 | 20 | | | | | |
| Chromium | 7.8 | 29.1 | 28.8 | 22.5 | 22.5 | 94 | 93 | | | | | |

ND = Not detected.

NC = Not calculated, calculation not applicable.

All results and spike amounts are reported on a dry weight basis.

All calculations are performed before rounding to avoid round-off errors in calculated results.

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MATRIX SPIKE / MATRIX SPIKE DUPLICATE REPORT
Metals Analysis and Preparation (cont.)

| Analyte | Sample | Concentration | | | Spiked | %Recovery | MS | MSD | MS | MSD | % RPD |
|------------|--------|-----------------|-----------------|-----|--------|-----------|-----|------|----|-----|----------|
| | | Matrix Spike | Matrix Spike | Dup | | | MS | MSD | MS | MSD | |
| Cobalt | ND | 52.6 | 52.2 | | 56.4 | 56.4 | 93 | 93 | | | 1 |
| Copper | ND | 31.1 | 30.4 | | 28.2 | 28.2 | 110 | 108 | | | 2 |
| Iron | 7240 | 7570 | 9470 | | 113 | 113 | 294 | 1980 | | | 148 |
| Magnesium | 2730 | 8000 | 8060 | | 5640 | 5640 | 94 | 95 | | | 1 |
| Manganese | 104 | 157 | 158 | | 56.4 | 56.4 | 94 | 95 | | | 2 |
| Molybdenum | ND | 19.9 | 19.8 | | 22.5 | 22.5 | 88 | 88 | | | 1 |
| Nickel | ND | 57.4 | 56.9 | | 56.4 | 56.4 | 102 | 101 | | | 1 |
| Potassium | 1690 | 7360 | 7240 | | 5640 | 5640 | 101 | 98 | | | 2 |
| Silver | ND | 4.9 | 4.7 | | 5.6 | 5.6 | 86 | 84 | | | 2 |
| Sodium | ND | 10600 | 10500 | | 11300 | 11300 | 94 | 93 | | | 1 |
| Vanadium | 15.9 | 67.8 | 69.1 | | 56.4 | 56.4 | 92 | 95 | | | 3 |
| Zinc | 20.3 | 70.3 | 76.0 | | 56.4 | 56.4 | 89 | 99 | | | 11 |

Test: TL-FAA-IRP-S

Matrix SOIL

Sample: 077428-0002

Units: mg/kg

| | | | | | | | | |
|----------|----|-----|-----|-----|-----|----|----|---|
| Thallium | ND | 4.0 | 3.9 | 5.0 | 5.0 | 79 | 78 | 2 |
|----------|----|-----|-----|-----|-----|----|----|---|

ND = Not detected.

NC = Not calculated, calculation not applicable.

All results and spike amounts are reported on a dry weight basis.

All calculations are performed before rounding to avoid round-off errors in calculated results.

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I-20

GENERAL INORGANICS

Enseco
Corning Environmental Services

(Soil/Solid)

Client Name: Gram, Inc.
Client ID: 02760001 (2.00, 6.00,)
Lab ID: 077428-0001-SA
Matrix: SOIL
Authorized: 30 AUG 94

Sampled: 24 AUG 94
Prepared: See Below

Received: 30 AUG 94
Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|---|-----------|------------------|-----------------|---------------------------------|------------------------|--------------------------|
| Cyanide, Total Nitrate + Nitrite (as N) | ND 8.4 | mg/kg | 0.52 | 9012 Modified 353.2 Modified | 07 SEP 94 16 SEP 94 | 07 SEP 94 16 SEP 94 R |

Percent Moisture is 4%. All results and limits are reported on a dry weight basis.

Note R : Raised reporting limit(s) due to high analyte level(s).

ND = Not detected

NA = Not applicable

Reported By: Lori Ann Upton

Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.
Rev 230787

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GENERAL INORGANICS

Enseco
Ceruny Environmental Services

(Soil/Solid)

Client Name: Gram, Inc.

Client ID: 02840001 (2.00, 6.00,)

Lab ID: 077428-0002-SA

Matrix: SOIL

Sampled: 25 AUG 94

Received: 30 AUG 94

Authorized: 30 AUG 94

Prepared: See Below

Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|---|------------|------------------|-----------------|---------------------------------|------------------------|--------------------------|
| Cyanide, Total Nitrate + Nitrite (as N) | ND 68.6 | mg/kg mg/kg | 0.56 2.8 | 9012 Modified 353.2 Modified | 07 SEP 94 16 SEP 94 | 07 SEP 94 16 SEP 94 R |

Percent Moisture is 11%. All results and limits are reported on a dry weight basis.

Note R : Raised reporting limit(s) due to high analyte level(s).

ND = Not detected

NA = Not applicable

Reported By: Lori Ann Upton

Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.
Rev 230787

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GENERAL INORGANICS

Enseco
Corning Environmental Services

(Soil/Solid)

Client Name: Gram, Inc.
Client ID: 00810001
Lab ID: 077428-0003-SA
Matrix: SOIL
Authorized: 30 AUG 94

(2.00, 6.00,)

Sampled: 25 AUG 94
Prepared: See BelowReceived: 30 AUG 94
Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|---|-----------|------------------|-----------------|---------------------------------|------------------------|------------------------|
| Cyanide, Total Nitrate + Nitrite (as N) | ND 4.0 | mg/kg | 0.57 0.29 | 9012 Modified 353.2 Modified | 07 SEP 94 16 SEP 94 | 07 SEP 94 16 SEP 94 |

Percent Moisture is 12%. All results and limits are reported on a dry weight basis.

ND = Not detected

NA = Not applicable

Reported By: Lori Ann Upton

Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.
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I-73

GENERAL INORGANICS

Enseco
Corning Environmental Service

(Soil/Solid)

Client Name: Gram, Inc.
Client ID: 00840001 (2.00,6.00,)
Lab ID: 077428-0004-SA
Matrix: SOIL
Authorized: 30 AUG 94

Sampled: 25 AUG 94
Prepared: See Below

Received: 30 AUG 94
Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|---|------------|------------------|-----------------|---------------------------------|------------------------|--------------------------|
| Cyanide, Total Nitrate + Nitrite (as N) | ND 95.4 | mg/kg mg/kg | 0.53 2.6 | 9012 Modified 353.2 Modified | 07 SEP 94 16 SEP 94 | 07 SEP 94 16 SEP 94 R |

Percent Moisture is 5%. All results and limits are reported on a dry weight basis.

Note R : Raised reporting limit(s) due to high analyte level(s).

ND = Not detected
NA = Not applicable

Reported By: Lori Ann Upton

Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.
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GENERAL INORGANICS

Enseco
Corning Environmental Services

(Soil/Solid)

Client Name: Gram, Inc.

Client ID: 00840002 (2.00, 6.00,)

Lab ID: 077428-0005-SA

Matrix: SOIL

Authorized: 30 AUG 94

Sampled: 25 AUG 94

Prepared: See Below

Received: 30 AUG 94

Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|---|------------|------------------|-----------------|---------------------------------|------------------------|--------------------------|
| Cyanide, Total Nitrate + Nitrite (as N) | ND 87.4 | mg/kg mg/kg | 0.53 2.7 | 9012 Modified 353.2 Modified | 07 SEP 94 16 SEP 94 | 07 SEP 94 16 SEP 94 R |

Percent Moisture is 6%. All results and limits are reported on a dry weight basis.

Note R : Raised reporting limit(s) due to high analyte level(s).

ND = Not detected

NA = Not applicable

Reported By: Lori Ann Upton

Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.
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GENERAL INORGANICS

Enseco
Corning Environmental Services

(Soil/Solid)

Client Name: Gram, Inc.

Client ID: 01510001 (2.00, 6.00,)

Lab ID: 077428-0006-SA

Matrix: SOIL

Authorized: 30 AUG 94

Sampled: 26 AUG 94

Received: 30 AUG 94

Prepared: See Below

Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|---|-----------|------------------|-----------------|---------------------------------|------------------------|------------------------|
| Cyanide, Total Nitrate + Nitrite (as N) | ND 2.0 | mg/kg mg/kg | 0.53 0.25 | 9012 Modified 353.2 Modified | 07 SEP 94 16 SEP 94 | 07 SEP 94 16 SEP 94 |

Percent Moisture is 6%. All results and limits are reported on a dry weight basis.

ND = Not detected

NA = Not applicable

Reported By: Lori Ann Upton

Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.
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GENERAL INORGANICS

Enseco
Corning Environmental Services

(Soil/Solid)

Client Name: Gram, Inc.
Client ID: 01570001 (2.00, 6.00,)
Lab ID: 077428-0007-SA

Matrix: SOIL Sampled: 26 AUG 94 Received: 30 AUG 94
Authorized: 30 AUG 94 Prepared: See Below Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|---|--------|------------------|-----------------|------------------------------|---------------------|---------------------|
| Cyanide, Total Nitrate + Nitrite (as N) | ND 5.4 | mg/kg mg/kg | 0.52 0.25 | 9012 Modified 353.2 Modified | 07 SEP 94 16 SEP 94 | 07 SEP 94 16 SEP 94 |

Percent Moisture is 3%. All results and limits are reported on a dry weight basis.

ND = Not detected

NA = Not applicable

Reported By: Lori Ann Upton

Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.
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GENERAL INORGANICS**Enseco**
*Corning Environmental Services***(Soil/Solid)**

Client Name: Gram, Inc.
Client ID: 01600001 (2.00,6.00,)
Lab ID: 077428-0008-SA
Matrix: SOIL
Authorized: 30 AUG 94

Sampled: 26 AUG 94 Received: 30 AUG 94
Prepared: See Below Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|---|-----------|------------------|-----------------|---------------------------------|------------------------|------------------------|
| Cyanide, Total Nitrate + Nitrite (as N) | ND 3.0 | mg/kg mg/kg | 0.51 0.25 | 9012 Modified 353.2 Modified | 07 SEP 94 16 SEP 94 | 07 SEP 94 16 SEP 94 |

Percent Moisture is 3%. All results and limits are reported on a dry weight basis.

ND = Not detected

NA = Not applicable

Reported By: Lori Ann Upton

Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.
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GENERAL INORGANICS

Enseco
Corning Environmental Services

(Soil/Solid)

Client Name: Gram, Inc.
Client ID: 01610001
Lab ID: 077428-0009-SA
Matrix: SOIL
Authorized: 30 AUG 94

(2.00, 6.00,)

Sampled: 26 AUG 94
Prepared: See BelowReceived: 30 AUG 94
Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|---|-----------|------------------|-----------------|---------------------------------|------------------------|------------------------|
| Cyanide, Total Nitrate + Nitrite (as N) | ND 2.4 | mg/kg mg/kg | 0.51 0.25 | 9012 Modified 353.2 Modified | 07 SEP 94 16 SEP 94 | 07 SEP 94 16 SEP 94 |

Percent Moisture is 2%. All results and limits are reported on a dry weight basis.

ND = Not detected
NA = Not applicable

Reported By: Lori Ann Upton

Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.
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GENERAL INORGANICS

Enseco
Formerly Environmental Services

(Soil/Solid)

Client Name: Gram, Inc.

Client ID: 01650001 (2.00, 6.00,)

Lab ID: 077428-0010-SA

Matrix: SOIL

Authorized: 30 AUG 94

Sampled: 26 AUG 94

Prepared: See Below

Received: 30 AUG 94

Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|---|-----------|------------------|-----------------|---------------------------------|------------------------|------------------------|
| Cyanide, Total Nitrate + Nitrite (as N) | ND 8.4 | mg/kg mg/kg | 0.53 0.25 | 9012 Modified 353.2 Modified | 07 SEP 94 16 SEP 94 | 07 SEP 94 16 SEP 94 |

Percent Moisture is 6%. All results and limits are reported on a dry weight basis.

ND = Not detected

NA = Not applicable

Reported By: Lori Ann Upton

Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.
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T-80

QC LOT ASSIGNMENT REPORT
Wet Chemistry Analysis and Preparation

| Laboratory Sample Number | QC Matrix | QC Category | QC Lot Number (DCS) | QC Run Number (SCS/BLANK) |
|-----------------------------|-----------|-------------|------------------------|------------------------------|
| 077428-0001-SA | SOIL | NO3&NO2-S | 16 SEP 94-A | 16 SEP 94-A |
| 077428-0001-SA | SOIL | CN-IRP-S | 07 SEP 94-A | 07 SEP 94-A |
| 077428-0002-SA | SOIL | NO3&NO2-S | 16 SEP 94-A | 16 SEP 94-A |
| 077428-0002-SA | SOIL | CN-IRP-S | 07 SEP 94-A | 07 SEP 94-A |
| 077428-0002-MS | SOIL | NO3&NO2-S | 16 SEP 94-A | 16 SEP 94-A |
| 077428-0002-MS | SOIL | CN-IRP-S | 07 SEP 94-A | 07 SEP 94-A |
| 077428-0002-SD | SOIL | NO3&NO2-S | 16 SEP 94-A | 16 SEP 94-A |
| 077428-0002-SD | SOIL | CN-IRP-S | 07 SEP 94-A | 07 SEP 94-A |
| 077428-0003-SA | SOIL | NO3&NO2-S | 16 SEP 94-A | 16 SEP 94-A |
| 077428-0003-SA | SOIL | CN-IRP-S | 07 SEP 94-A | 07 SEP 94-A |
| 077428-0004-SA | SOIL | NO3&NO2-S | 16 SEP 94-A | 16 SEP 94-A |
| 077428-0004-SA | SOIL | CN-IRP-S | 07 SEP 94-A | 07 SEP 94-A |
| 077428-0005-SA | SOIL | NO3&NO2-S | 16 SEP 94-A | 16 SEP 94-A |
| 077428-0005-SA | SOIL | CN-IRP-S | 07 SEP 94-A | 07 SEP 94-A |
| 077428-0006-SA | SOIL | NO3&NO2-S | 16 SEP 94-A | 16 SEP 94-A |
| 077428-0006-SA | SOIL | CN-IRP-S | 07 SEP 94-A | 07 SEP 94-A |
| 077428-0007-SA | SOIL | NO3&NO2-S | 16 SEP 94-A | 16 SEP 94-A |
| 077428-0007-SA | SOIL | CN-IRP-S | 07 SEP 94-A | 07 SEP 94-A |
| 077428-0008-SA | SOIL | NO3&NO2-S | 16 SEP 94-A | 16 SEP 94-A |
| 077428-0008-SA | SOIL | CN-IRP-S | 07 SEP 94-A | 07 SEP 94-A |
| 077428-0009-SA | SOIL | NO3&NO2-S | 16 SEP 94-A | 16 SEP 94-A |
| 077428-0009-SA | SOIL | CN-IRP-S | 07 SEP 94-A | 07 SEP 94-A |
| 077428-0010-SA | SOIL | NO3&NO2-S | 16 SEP 94-A | 16 SEP 94-A |
| 077428-0010-SA | SOIL | CN-IRP-S | 07 SEP 94-A | 07 SEP 94-A |

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METHOD BLANK REPORT
Wet Chemistry Analysis and Preparation

| Analyte | Result | Units | Reporting Limit |
|--|--------|-------|-----------------|
| Test: NO ₃ &NO ₂ -S Matrix: SOIL QC Lot: 16 SEP 94-A QC Run: 16 SEP 94-A | | | |
| Nitrate + Nitrite (as N) | ND | mg/kg | 0.25 |
| Test: CN-9012-IRP-KAFB-S Matrix: SOIL QC Lot: 07 SEP 94-A QC Run: 07 SEP 94-A | | | |
| Cyanide, Total | ND | mg/kg | 0.50 |
| Test: NO ₃ &NO ₂ -S Matrix: SOIL QC Lot: 16 SEP 94-A QC Run: 16 SEP 94-A | | | |
| Nitrate + Nitrite (as N) | ND | mg/kg | 0.25 |
| Test: CN-9012-IRP-KAFB-S Matrix: SOIL QC Lot: 07 SEP 94-A QC Run: 07 SEP 94-A | | | |
| Cyanide, Total | ND | mg/kg | 0.50 |
| Test: NO ₃ &NO ₂ -S Matrix: SOIL QC Lot: 16 SEP 94-A QC Run: 16 SEP 94-A | | | |
| Nitrate + Nitrite (as N) | ND | mg/kg | 0.25 |
| Test: CN-9012-IRP-KAFB-S Matrix: SOIL QC Lot: 07 SEP 94-A QC Run: 07 SEP 94-A | | | |
| Cyanide, Total | ND | mg/kg | 0.50 |

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METHOD BLANK REPORT
Wet Chemistry Analysis and Preparation (cont.)

| Analyte | Result | Units | Reporting Limit |
|--|--------|-------|-----------------|
| Test: NO ₃ &NO ₂ -S Matrix: SOIL QC Lot: 16 SEP 94-A QC Run: 16 SEP 94-A | | | |
| Nitrate + Nitrite (as N) | ND | mg/kg | 0.25 |
| Test: CN-9012-IRP-KAFB-S Matrix: SOIL QC Lot: 07 SEP 94-A QC Run: 07 SEP 94-A | | | |
| Cyanide, Total | ND | mg/kg | 0.50 |

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LABORATORY CONTROL SAMPLE REPORT
Wet Chemistry Analysis and Preparation

| Analyte | Concentration | | Accuracy(%) | |
|---------|---------------|----------|-------------|--------|
| | Spiked | Measured | LCS | Limits |

Category: NO₃&NO₂-S Nitrate plus nitrite for soil/solid/waste matrices.

Matrix: SOIL

QC Lot: 16 SEP 94-A QC Run: 16 SEP 94-A

Concentration Units: mg/kg

| | | | | |
|--------------------------|------|------|-----|--------|
| Nitrate + Nitrite (as N) | 12.5 | 12.4 | 100 | 75-125 |
|--------------------------|------|------|-----|--------|

| Analyte | Concentration | | Accuracy(%) | |
|---------|---------------|----------|-------------|--------|
| | Spiked | Measured | LCS | Limits |

Category: CN-IRP-S Cyanide

Matrix: SOIL

QC Lot: 07 SEP 94-A QC Run: 07 SEP 94-A

Concentration Units: mg/kg

| | | | | |
|----------------|------|------|----|--------|
| Cyanide, Total | 5.00 | 4.95 | 99 | 77-115 |
|----------------|------|------|----|--------|

ND = Not Detected

Calculations are performed before rounding to avoid round-off errors in calculated results.

F-84

MATRIX SPECIFIC QC
ASSIGNMENT REPORT
Wet Chemistry Analysis and Preparation

| QC SAMPLE TYPE | TEST | LABORATORY SAMPLE NUMBER | QC LOT |
|------------------------|--------------------|-----------------------------|-------------|
| MATRIX SPIKE DUPLICATE | NO3&NO2-S | 077428-0002-SD | 16 SEP 94-A |
| MATRIX SPIKE | NO3&NO2-S | 077428-0002-MS | 16 SEP 94-A |
| MATRIX SPIKE DUPLICATE | CN-9012-IRP-KAFB-S | 077428-0002-SD | 07 SEP 94-A |
| MATRIX SPIKE | CN-9012-IRP-KAFB-S | 077428-0002-MS | 07 SEP 94-A |

7-85

MATRIX SPIKE / MATRIX SPIKE DUPLICATE REPORT
Wet Chemistry Analysis and Preparation

| Analyte | Sample | Concentration | | | Spiked MS | %Recovery MS | % MSD |
|---------|--------|-----------------|---------------------|-----|--------------|-----------------|----------|
| | | Matrix Spike | Matrix Spike Dup | RPD | | | |

Test: NO₃&NO₂-S
Matrix SOIL
Sample: 077428-0002
Units: mg/kg

| | | | | | | | | |
|-----------------------------|------|------|------|-----|-----|----|----|----|
| Nitrate + Nitrite (as N) | 68.6 | 56.6 | 56.3 | 2.5 | 2.5 | NC | NC | NC |
|-----------------------------|------|------|------|-----|-----|----|----|----|

Test: CN-9012-IRP-KAFB-S
Matrix SOIL
Sample: 077428-0002
Units: mg/kg

| | | | | | | | | |
|----------------|----|-----|-----|-----|-----|-----|-----|---|
| Cyanide, Total | ND | 5.2 | 5.4 | 5.0 | 5.0 | 105 | 109 | 4 |
|----------------|----|-----|-----|-----|-----|-----|-----|---|

ND = Not detected.

NC = Not calculated, calculation not applicable.

All results and spike amounts are reported on a dry weight basis.

All calculations are performed before rounding to avoid round-off errors in calculated results.

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September 30, 1994
QUANTERRA PROJECT NUMBER: 077507
PO/CONTRACT: 06

Mr. Jeff Johnson
Gram, Inc.
8500 Menual Blvd. NE, #B-370
Albuquerque, New Mexico 87112

Dear Mr. Johnson:

This report contains the analytical results for the nineteen soil samples which were received under chain of custody by Quanterra West Sacramento on 03 September 1994. These samples are associated with your McCormick Ranch, Kirkland AFB project.

The case narrative is an integral part of this report.

Partial preliminary results were sent via facsimile on 23 September 1994.

If you have any questions, please call me at (916) 374-4362.

Sincerely,


Diana L. Brooks
Project Manager

dlb

Enseco - CAL
2544 Industrial Blvd.
West Sacramento, CA 95691-3435
(916) 372-1393
FAX: (916) 372-7768

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Case Narrative

Quanterra's Quality Assurance Program

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Specialty Explosives by HPLC/MS - Method 8321

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Sample Data Sheets

Method Blank Report

Laboratory Control Sample Report (LCS)

Matrix Specific QC

Nitroaromatics and Nitramines by HPLC - Method 8330

Includes Samples: 1,2,5,6,7,8,9,10,11,12

Sample Data Sheets

Method Blank Report

Laboratory Control Sample Report (LCS)

Matrix Specific QC

Semivolatile Organics - Method 8270

Includes Samples: 2,3,4,5,6,7,9,10,11,12

Sample Data Sheets

Method Blank Report

Laboratory Control Sample Report (LCS)

Matrix Specific QC

Selected Metals - Various Methods

Includes Samples: 1,2,5,6,7,8,9,10,11,12,13,14,15,16,17

Sample Data Sheets

Method Blank Report

Laboratory Control Sample Report (LCS)

Matrix Specific QC

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QUANTERRA PROJECT NUMBER 077507

General Inorganics - Various Methods

Includes Samples: 1,2,5,6,7,8,9,10,11,12

Sample Data Sheets

Method Blank Report

Laboratory Control Sample Report (LCS)

Matrix Specific QC

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CASE NARRATIVE

QUANTERRA PROJECT NUMBER 077507

General Comments

The temperature blanks associated with your samples were recorded as 1.8 deg C and 9.8 deg C. The ambient temperatures were 3.2 deg C and 9.4 deg C. The samples (02660001 and 02960001) associated with the temperature of 9.8 deg C were canceled per your instructions.

Semivolatile Organics - Method 8270

Sample 02540001 matrix spike duplicate (Quanterra ID 077507-0010SD) has a Terphenyl-d14 surrogate recovery above the control limits. A re-injection of this sample confirmed the recovery. The initial injection was reported.

The matrix spike/matrix spike duplicate had several recoveries above the control limits. The samples were re-injected and the recoveries were confirmed. The initial injection was reported.

The laboratory control sample has benzoic acid reported as NA. The actual value recovered (43%) is within the control limits. Noted in the QAPjP, this compound is flagged for a variance.

Due to electronic deliverable limitations, the library search data is available in hardcopy format only.

Metals - Various Methods

The ICAP matrix spike/matrix spike duplicate for iron and manganese have %RPDs above control limits and antimony, barium and manganese recoveries outside of the control limits. Re-analysis of the pair confirm the initial recoveries and %RPDs. The initial analysis was reported.

The matrix spike/matrix spike duplicate for Aluminum, Calcium and Iron have recoveries outside of the control limits due to the element having a sample concentration greater than or equal to 4 times the concentration of the matrix spike.

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CASE NARRATIVE - cont.

QUANTERRA PROJECT NUMBER 077507

Selected Metals - Various Methods cont.

The selenium matrix spike/matrix spike duplicate have recoveries above the control limits. The re-analysis yielded a matrix spike recovery within the control limit and a matrix spike duplicate recovery above the control limit. Because the recoveries for the re-analysis were more acceptable, the re-analysis was reported.

Analysis for thallium was performed by graphite furnace in order to achieve detection levels required by the QAPjP.

Inorganics - Various Methods

The Nitrate plus Nitrite laboratory control sample was mis-spiked at 12.5 mg/Kg due to a misinterpretation of the QAPjP.

The matrix spike/matrix spike duplicate recoveries were not calculated due to the sample value being 4 times the concentration of the matrix spike.

There were no other anomalies associated with this report.

QUANTERRA'S QUALITY ASSURANCE PROGRAM

Quanterra has implemented an extensive Quality Assurance (QA) program to ensure the production of scientifically sound, legally defensible data of known documental quality. A key element of this program is Quanterra's Laboratory Control Sample (LCS) system. Controlling lab operations with LCS (as opposed to matrix spike/matrix spike duplicate samples), allows the lab to differentiate between bias as a result of procedural errors versus bias due to matrix effects. The analyst can then identify and implement the appropriate corrective actions at the bench level, without waiting for extensive senior level review or costly and time-consuming sample re-analyses. The LCS program also provides our client with information to assess batch, and overall laboratory performance.

Laboratory Control Samples - (LCS)

Laboratory Control Samples (LCS) are well-characterized, laboratory generated samples used to monitor the laboratory's day-to-day performance of routine analytical methods. The results of the LCS are compared to well-defined laboratory acceptance criteria to determine whether the laboratory system is "in control". Three types of LCS are routinely analyzed: Duplicate Control Samples (DCS), Single Control Samples (SCS), and method blanks. Each of these LCS are described below.

Duplicate Control Samples. A DCS is a well-characterized matrix (blank water, sand, sodium sulfate or celite) which is spiked with certain target parameters and analyzed at approximately 10% of the sample load in order to establish method-specific control limits.

Single Control Samples. An SCS consists of a control matrix that is spiked with surrogate compounds appropriate to the method being used. In cases where no surrogate is available, (e.g. metals or conventional analyses) a single control sample identical to the DCS serves as the control sample. An SCS is prepared for each sample lot. Accuracy is calculated identically to the DCS.

Method Blank Results. A method blank is a laboratory-generated sample which assesses the degree to which laboratory operations and procedures cause false-positive analytical results for your samples.

SAMPLE DESCRIPTION INFORMATION
for
Gram, Inc.

| Lab ID | Client ID | | Matrix | Sampled Date | Received Time | Received Date |
|----------------|-----------|--------------|--------|--------------|---------------|---------------|
| 077507-0001-SA | 03010001 | (2.00,6.00,) | SOIL | 29 AUG 94 | 08:51 | 03 SEP 94 |
| 077507-0002-SA | 03070001 | (2.00,6.00,) | SOIL | 29 AUG 94 | 10:27 | 03 SEP 94 |
| 077507-0003-SA | 02710001 | (3.00,6.00,) | SOIL | 30 AUG 94 | 09:39 | 03 SEP 94 |
| 077507-0004-SA | 02730001 | (3.00,6.00,) | SOIL | 30 AUG 94 | 10:04 | 03 SEP 94 |
| 077507-0005-SA | 02310001 | (3.00,6.00,) | SOIL | 30 AUG 94 | 12:54 | 03 SEP 94 |
| 077507-0006-SA | 02310002 | (3.00,6.00,) | SOIL | 30 AUG 94 | 12:54 | 03 SEP 94 |
| 077507-0007-SA | 02380001 | (2.00,4.00,) | SOIL | 31 AUG 94 | 08:45 | 03 SEP 94 |
| 077507-0008-SA | 02880001 | (3.00,6.00,) | SOIL | 31 AUG 94 | 12:00 | 03 SEP 94 |
| 077507-0009-SA | 02920001 | (3.00,6.00,) | SOIL | 31 AUG 94 | 13:25 | 03 SEP 94 |
| 077507-0010-SA | 02540001 | (2.50,6.00,) | SOIL | 01 SEP 94 | 09:30 | 03 SEP 94 |
| 077507-0010-MS | 02540001 | (2.50,6.00,) | SOIL | 01 SEP 94 | 09:30 | 03 SEP 94 |
| 077507-0010-SD | 02540001 | (2.50,6.00,) | SOIL | 01 SEP 94 | 09:30 | 03 SEP 94 |
| 077507-0011-SA | 02550001 | (2.50,6.00,) | SOIL | 01 SEP 94 | 10:22 | 03 SEP 94 |
| 077507-0012-SA | 02580001 | (2.50,6.00,) | SOIL | 01 SEP 94 | 10:35 | 03 SEP 94 |
| 077507-0013-SA | 02470001 | (1.50,3.00,) | SOIL | 02 SEP 94 | 08:25 | 03 SEP 94 |
| 077507-0014-SA | 02460001 | (2.50,6.00,) | SOIL | 02 SEP 94 | 08:27 | 03 SEP 94 |
| 077507-0015-SA | 02480001 | (3.00,5.50,) | SOIL | 02 SEP 94 | 08:45 | 03 SEP 94 |
| 077507-0016-SA | 02500001 | (1.50,2.50,) | SOIL | 02 SEP 94 | 09:09 | 03 SEP 94 |
| 077507-0017-SA | 02490001 | (3.00,6.00,) | SOIL | 02 SEP 94 | 09:10 | 03 SEP 94 |
| 077507-0018-SA | 02660001 | (2.00,6.00,) | SOIL | 02 SEP 94 | 09:57 | 07 SEP 94 |
| 077507-0019-SA | 02960001 | (2.50,5.00,) | SOIL | 02 SEP 94 | 11:20 | 07 SEP 94 |

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CHAIN OF CUSTODY

NOTE: MEASURE COOLER TEMPERATURE FROM TEMPERATURE BLANK

| SAMPLE IDENTIFICATION | ITEM ID, LOCATION ID, SAMPLE ID) | # OF CONTAINERS • | | 1 16-oz glass jar per sample location | |
|--------------------------------------|-----------------------------------|--------------------|------------------|---------------------------------------|-----|
| | | TYPE OF CONTAINERS | CONTAINER VOLUME | 16 oz | 4°C |
| PROJECT NAME: | McCORMICK RANCH | | | | |
| CLIENT: | PHILLIPS LABORATORY, KIRTLAND AFB | | | | |
| PRIMARY CONTACT: | JEFF JOHNSON (GRAM) 505-299-1282 | | | | |
| SECONDARY CONTACT: | STEVE GORIN (LATA) 505-880-3439 | | | | |
| LABORATORY CONTACT: | | | | | |
| ANALYSES REQUESTED | | 1 | 2 | 3 | 4 |
| DATE/TIME | | | | | |
| MATRIX | COLLECTED | | | | |
| RTLD154 - 0 3 0 1 - 0 0 0 1 | 5 | 1/19/94 0851 | ✓ | ✓ | ✓ |
| RTLD154 - 0 3 0 7 - 0 0 0 1 | 5 | 1/21/94 1027 | ✓ | ✓ | ✓ |
| RTLD154 - 0 2 7 1 - 0 0 0 1 | 5 | 8/20/94 0939 | ✓ | | |
| RTLD154 - 0 2 7 3 - 0 0 0 1 | 5 | 8/20/94 1004 | ✓ | | |
| RTLD154 - 0 2 3 1 - 0 0 0 1 | 5 | 8/20/94 1254 | ✓ | ✓ | ✓ |
| RTLD154 - 0 2 3 1 - 0 0 0 2 | 5 | 8/20/94 1254 | ✓ | ✓ | ✓ |
| RTLD154 - 0 2 3 8 - 0 0 0 1 | 5 | 8/20/94 0845 | ✓ | ✓ | ✓ |
| RTLD154 - 0 2 5 8 - 0 0 0 1 | 5 | 8/21/94 1200 | ✓ | ✓ | ✓ |
| RTLD154 - 0 2 9 2 - 0 0 0 1 | 5 | 1/1/94 1325 | ✓ | ✓ | ✓ |
| RTLD154 - 0 2 5 4 - 0 0 0 1 | 5 | 9/1/94 0930 | ✓ | ✓ | ✓ |
| RTLD154 - 0 2 5 4 - 0 0 0 1 ms (msd) | 5 | 9/1/94 0930 | ✓ | ✓ | ✓ |

CONTAINER TYPES:

- SOIL
- POLYETHYLENE
- WATER
- CLEAR GLASS
- OTHER
- AMBER GLASS

NOTE: FOR SOIL SAMPLES ONLY ONE 16-oz GLASS JAR OF SOIL AT

C IS REQUIRED TO PROVIDE SUFFICIENT SAMPLE VOLUME FOR ALL

NALYSES. THE REQUIRED ANALYSES FOR EACH SOIL SAMPLE •

RE IDENTIFIED BY CHECKING THE APPROPRIATE BOXES (1 - 7)

LABORATORY ANALYSES:

1. EXPLOSIVES (SW8330, SW8330-ADD-1, SW8330-ADD-2)
2. NITRATE + NITRITE (E333.2)
3. SEMI-VOCs (SW8270)
4. ICP METALS (SW6010); MINUS LEAD, ARSENIC, SelenIUM, AND MERCURY
5. MERCURY (SW7471)
6. LEAD (SW7421), ARSENIC (SW7060), SelenIUM (SW7740)
7. CYANIDE (SW9012)

*Sample no'd in
soil condition.
Soil temp = 1.8°, air
temp = 3.2° (msd)*

RECEIVED BY:

| COMPANY NAME | SIGNATURE | COMPANY NAME | SIGNATURE | RECEIVED BY SHIPPER: |
|--------------|--------------------------|--------------|---------------------|------------------------|
| Gram, Inc | <i>Theresa Metherell</i> | Gram, Inc | <i>Jeff Johnson</i> | DATE 9/28/94 TIME 1435 |

| COMPANY NAME | SIGNATURE | COMPANY NAME | SIGNATURE | RECEIVED BY LABORATORY: |
|--------------|--------------------------|--------------|---------------------|-------------------------|
| Gram, Inc | <i>Theresa Metherell</i> | Gram, Inc | <i>Jeff Johnson</i> | DATE 9/23/94 TIME 1515 |

| COMPANY NAME | SIGNATURE | COMPANY NAME | SIGNATURE | RELEASER: |
|--------------|--------------------------|--------------|---------------------|------------------------|
| Gram, Inc | <i>Theresa Metherell</i> | Gram, Inc | <i>Jeff Johnson</i> | DATE 9/23/94 TIME 0932 |
| | | | | |

Specialty Explosives by HPLC/MS

Enseco
Corning Environmental Services

Method 8321

Client Name: Gram, Inc.
Client ID: 03010001
Lab ID: 077507-0001-SA
Matrix: SOIL
Authorized: 03 SEP 94

(2.00,6.00,)

Sampled: 29 AUG 94
Prepared: 09 SEP 94

Received: 03 SEP 94
Analyzed: 27 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|---------------|--------|------------------|--------------------|
| Nitroglycerin | ND | mg/kg | 0.50 |
| PETN | ND | mg/kg | 0.50 |

ND = Not detected
NA = Not applicable

Reported By: Mike Filigenzi

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

I-97

Specialty Explosives by HPLC/MS

Enseco
Corning Environmental Service

Method 8321

Client Name: Gram, Inc.

Client ID: 03070001 (2.00,6.00,)

Lab ID: 077507-0002-SA

Matrix: SOIL

Authorized: 03 SEP 94

Sampled: 29 AUG 94

Prepared: 09 SEP 94

Received: 03 SEP 94

Analyzed: 27 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|---------------|--------|------------------|--------------------|
| Nitroglycerin | ND | mg/kg | 0.50 |
| PETN | ND | mg/kg | 0.50 |

ND = Not detected

NA = Not applicable

Reported By: Mike Filigenzi

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

I-98

Specialty Explosives by HPLC/MS

Enseco
Corning Environmental Services

Method 8321

Client Name: Gram, Inc.
Client ID: 02310001 (3.00,6.00,)
Lab ID: 077507-0005-SA
Matrix: SOIL
Authorized: 03 SEP 94

Sampled: 30 AUG 94
Prepared: 09 SEP 94

Received: 03 SEP 94
Analyzed: 27 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|---------------|--------|------------------|--------------------|
| Nitroglycerin | ND | mg/kg | 0.50 |
| PETN | ND | mg/kg | 0.50 |

ND = Not detected
NA = Not applicable

Reported By: Mike Filigenzi

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

I -99

Specialty Explosives by HPLC/MS

Enseco
Corning Environmental Services

Method 8321

Client Name: Gram, Inc.

Client ID: 02310002 (3.00, 6.00,)

Lab ID: 077507-0006-SA

Matrix: SOIL

Authorized: 03 SEP 94

Sampled: 30 AUG 94

Prepared: 09 SEP 94

Received: 03 SEP 94

Analyzed: 27 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|---------------|--------|------------------|--------------------|
| Nitroglycerin | ND | mg/kg | 0.50 |
| PETN | ND | mg/kg | 0.50 |

ND = Not detected

NA = Not applicable

Reported By: Mike Filigenzi

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

I-100

Specialty Explosives by HPLC/MS

Enseco
Corning Environmental Services

Method 8321

Client Name: Gram, Inc.

Client ID: 02380001 (2.00,4.00,)

Lab ID: 077507-0007-SA

Matrix: SOIL

Authorized: 03 SEP 94

Sampled: 31 AUG 94

Prepared: 09 SEP 94

Received: 03 SEP 94

Analyzed: 27 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|---------------|--------|------------------|--------------------|
| Nitroglycerin | ND | mg/kg | 0.50 |
| PETN | ND | mg/kg | 0.50 |

ND = Not detected
NA = Not applicable

Reported By: Mike Filigenzi

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

I-101

Specialty Explosives by HPLC/MS

Enseco
Corning Environmental Service

Method 8321

Client Name: Gram, Inc.

Client ID: 02880001

(3.00, 6.00,)

Lab ID: 077507-0008-SA

Matrix: SOIL

Authorized: 03 SEP 94

Sampled: 31 AUG 94
Prepared: 09 SEP 94

Received: 03 SEP 94

Analyzed: 27 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|---------------|--------|------------------|--------------------|
| Nitroglycerin | ND | mg/kg | 0.50 |
| PETN | ND | mg/kg | 0.50 |

ND = Not detected

NA = Not applicable

Reported By: Mike Filigenzi

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

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Specialty Explosives by HPLC/MS

Enseco
Corning Environmental Services

Method 8321

Client Name: Gram, Inc.
Client ID: 02920001
Lab ID: 077507-0009-SA
Matrix: SOIL
Authorized: 03 SEP 94

(3.00,6.00,)

Sampled: 31 AUG 94
Prepared: 09 SEP 94

Received: 03 SEP 94
Analyzed: 27 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|---------------|--------|------------------|--------------------|
| Nitroglycerin | ND | mg/kg | 0.50 |
| PETN | ND | mg/kg | 0.50 |

ND = Not detected
NA = Not applicable

Reported By: Mike Filigenzi

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

I-103

Method 8321

Client Name: Gram, Inc.
Client ID: 02540001 (2.50, 6.00,)
Lab ID: 077507-0010-SA
Matrix: SOIL Sampled: 01 SEP 94 Received: 03 SEP 94
Authorized: 03 SEP 94 Prepared: 09 SEP 94 Analyzed: 27 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|---------------|--------|------------------|--------------------|
| Nitroglycerin | ND | mg/kg | 0.50 |
| PETN | ND | mg/kg | 0.50 |

ND = Not detected
NA = Not applicable

Reported By: Mike Filigenzi

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

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Specialty Explosives by HPLC/MS

Enseco
Corning Environmental Services

Method 8321

Client Name: Gram, Inc.
Client ID: 02550001
Lab ID: 077507-0011-SA
Matrix: SOIL
Authorized: 03 SEP 94

(2.50,6.00,)
Sampled: 01 SEP 94
Prepared: 09 SEP 94

Received: 03 SEP 94
Analyzed: 27 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|---------------|--------|------------------|--------------------|
| Nitroglycerin | ND | mg/kg | 0.50 |
| PETN | ND | mg/kg | 0.50 |

ND = Not detected
NA = Not applicable

Reported By: Mike Filigenzi

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

I-105

Method 8321

Client Name: Gram, Inc.

Client ID: 02580001

(2.50, 6.00,)

Lab ID: 077507-0012-SA

Matrix: SOIL

Sampled: 01 SEP 94

Received: 03 SEP 94

Authorized: 03 SEP 94

Prepared: 09 SEP 94

Analyzed: 27 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|---------------|--------|------------------|--------------------|
| Nitroglycerin | ND | mg/kg | 0.50 |
| PETN | ND | mg/kg | 0.50 |

ND = Not detected
NA = Not applicable

Reported By: Mike Filigenzi

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

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QC LOT ASSIGNMENT REPORT
Special Services - LC Mass Spectrometry

| Laboratory Sample Number | QC Matrix | QC Category | QC Lot Number (DCS) | QC Run Number (SCS/BLANK) |
|-----------------------------|-----------|-------------|------------------------|------------------------------|
| 077507-0001-SA | SOIL | 8321-IRP-S | 09 SEP 94-7B | 09 SEP 94-7B |
| 077507-0002-SA | SOIL | 8321-IRP-S | 09 SEP 94-7B | 09 SEP 94-7B |
| 077507-0005-SA | SOIL | 8321-IRP-S | 09 SEP 94-7B | 09 SEP 94-7B |
| 077507-0006-SA | SOIL | 8321-IRP-S | 09 SEP 94-7B | 09 SEP 94-7B |
| 077507-0007-SA | SOIL | 8321-IRP-S | 09 SEP 94-7B | 09 SEP 94-7B |
| 077507-0008-SA | SOIL | 8321-IRP-S | 09 SEP 94-7B | 09 SEP 94-7B |
| 077507-0009-SA | SOIL | 8321-IRP-S | 09 SEP 94-7B | 09 SEP 94-7B |
| 077507-0010-SA | SOIL | 8321-IRP-S | 09 SEP 94-7B | 09 SEP 94-7B |
| 077507-0010-MS | SOIL | 8321-IRP-S | 09 SEP 94-7B | 09 SEP 94-7B |
| 077507-0010-SD | SOIL | 8321-IRP-S | 09 SEP 94-7B | 09 SEP 94-7B |
| 077507-0011-SA | SOIL | 8321-IRP-S | 09 SEP 94-7B | 09 SEP 94-7B |
| 077507-0012-SA | SOIL | 8321-IRP-S | 09 SEP 94-7B | 09 SEP 94-7B |

METHOD BLANK REPORT
Special Services - LC Mass Spectrometry

| Analyte | Result | Units | Reporting Limit |
|---|--------|-------|-----------------|
| Test: 8321-IRP-EXP-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 09 SEP 94-7B QC Run: 09 SEP 94-7B | | | |
| Nitroglycerin | ND | mg/kg | 0.50 |
| PETN | ND | mg/kg | 0.50 |
| Test: 8321-IRP-EXP-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 09 SEP 94-7B QC Run: 09 SEP 94-7B | | | |
| Nitroglycerin | ND | mg/kg | 0.50 |
| PETN | ND | mg/kg | 0.50 |
| Test: 8321-IRP-EXP-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 09 SEP 94-7B QC Run: 09 SEP 94-7B | | | |
| Nitroglycerin | ND | mg/kg | 0.50 |
| PETN | ND | mg/kg | 0.50 |

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LABORATORY CONTROL SAMPLE REPORT
Special Services - LC Mass Spectrometry

| Analyte | Concentration | | Accuracy(%) | |
|--|---------------|----------|-------------|--------|
| | Spiked | Measured | LCS | Limits |
| Category: 8321-IRP-S Explosives by HPLC/MS | | | | |
| Matrix: SOIL | | | | |
| QC Lot: 09 SEP 94-7B QC Run: 09 SEP 94-7B | | | | |
| Concentration Units: mg/kg | | | | |
| Nitroglycerin | 5.00 | 4.15 | 83 | 65-135 |
| PETN | 2.50 | 2.29 | 92 | 65-135 |

ND = Not Detected

Calculations are performed before rounding to avoid round-off errors in calculated results.

I-109

MATRIX SPECIFIC QC
ASSIGNMENT REPORT
Special Services - LC Mass Spectrometry

| QC SAMPLE TYPE | TEST | LABORATORY SAMPLE NUMBER | QC LOT |
|------------------------|----------------|-----------------------------|--------------|
| MATRIX SPIKE DUPLICATE | 8321-IRP-EXP-S | 077507-0010-SD | 09 SEP 94-7B |
| MATRIX SPIKE | 8321-IRP-EXP-S | 077507-0010-MS | 09 SEP 94-7B |

I-110

MATRIX SPIKE / MATRIX SPIKE DUPLICATE REPORT
Special Services - LC Mass Spectrometry

Enseco
Corning Environmental Services

| Analyte | Sample | Concentration | | | Spiked MS | MSD | %MS | MSD | %MSD | % RPD |
|---------------|--------|-----------------|-----------------|-----|--------------|-----|-----|-----|------|----------|
| | | Matrix Spike | Matrix Spike | Dup | | | | | | |
| Nitroglycerin | ND | 5.1 | 4.5 | 5.0 | 5.0 | 102 | 91 | 102 | 103 | 12 |
| PETN | ND | 2.6 | 2.6 | 2.5 | 2.5 | 103 | 103 | 103 | 103 | 0 |

ND = Not detected.

NC = Not calculated, calculation not applicable.

All calculations are performed before rounding to avoid round-off errors in calculated results.

I-111

I-112

Method 8330

Client Name: Gram, Inc.
 Client ID: 03010001
 Lab ID: 077507-0001-SA
 Matrix: SOIL
 Authorized: 03 SEP 94

(2.00,6.00,)

Sampled: 29 AUG 94
 Prepared: 09 SEP 94Received: 03 SEP 94
 Analyzed: 13 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|-----------------------|--------|------------------|--------------------|
| HMX | ND | mg/kg | 0.25 |
| sym-Trinitrobenzene | ND | mg/kg | 0.25 |
| RDX | ND | mg/kg | 0.25 |
| 1,3-Dinitrobenzene | ND | mg/kg | 0.25 |
| Nitrobenzene | ND | mg/kg | 0.25 |
| 2,4,6-Trinitrotoluene | ND | mg/kg | 0.25 |
| Tetryl | ND | mg/kg | 0.25 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2-Nitrotoluene | ND | mg/kg | 0.25 |
| 3-Nitrotoluene | ND | mg/kg | 0.25 |
| 4-Nitrotoluene | ND | mg/kg | 0.25 |

ND = Not detected
 NA = Not applicable

Reported By: Dennis Gall

Approved By: Karla Buechler

The cover letter is an integral part of this report.
 Rev 230787

I.113

Nitroaromatics and Nitramines by HPLC

Enseco
Corning Environmental Services

Method 8330

Client Name: Gram, Inc.
Client ID: 03070001
Lab ID: 077507-0002-SA
Matrix: SOIL
Authorized: 03 SEP 94

Sampled: 29 AUG 94
Prepared: 09 SEP 94

Received: 03 SEP 94
Analyzed: 13 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|-----------------------|--------|------------------|--------------------|
| HMX | ND | mg/kg | 0.25 |
| sym-Trinitrobenzene | ND | mg/kg | 0.25 |
| RDX | ND | mg/kg | 0.25 |
| 1,3-Dinitrobenzene | ND | mg/kg | 0.25 |
| Nitrobenzene | ND | mg/kg | 0.25 |
| 2,4,6-Trinitrotoluene | ND | mg/kg | 0.25 |
| Tetryl | ND | mg/kg | 0.25 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2-Nitrotoluene | ND | mg/kg | 0.25 |
| 3-Nitrotoluene | ND | mg/kg | 0.25 |
| 4-Nitrotoluene | ND | mg/kg | 0.25 |

ND = Not detected
NA = Not applicable

Reported By: Dennis Gall

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

T-114

Method 8330

Client Name: Gram, Inc.

Client ID: 02310001 (3.00, 6.00,)

Lab ID: 077507-0005-SA

Matrix: SOIL

Authorized: 03 SEP 94

Sampled: 30 AUG 94
Prepared: 09 SEP 94Received: 03 SEP 94
Analyzed: 13 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|-----------------------|--------|------------------|--------------------|
| HMX | ND | mg/kg | 0.25 |
| sym-Trinitrobenzene | ND | mg/kg | 0.25 |
| RDX | ND | mg/kg | 0.25 |
| 1,3-Dinitrobenzene | ND | mg/kg | 0.25 |
| Nitrobenzene | ND | mg/kg | 0.25 |
| 2,4,6-Trinitrotoluene | ND | mg/kg | 0.25 |
| Tetryl | ND | mg/kg | 0.25 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2-Nitrotoluene | ND | mg/kg | 0.25 |
| 3-Nitrotoluene | ND | mg/kg | 0.25 |
| 4-Nitrotoluene | ND | mg/kg | 0.25 |

ND = Not detected

NA = Not applicable

Reported By: Dennis Gall

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

I-115

Nitroaromatics and Nitramines by HPLC

Enseco
Corning Environmental Services

Method 8330

Client Name: Gram, Inc.

Client ID: 02310002 (3.00, 6.00,)

Lab ID: 077507-0006-SA

Matrix: SOIL

Authorized: 03 SEP 94

Sampled: 30 AUG 94

Received: 03 SEP 94

Prepared: 09 SEP 94

Analyzed: 13 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|-----------------------|--------|------------------|--------------------|
| HMX | ND | mg/kg | 0.25 |
| sym-Trinitrobenzene | ND | mg/kg | 0.25 |
| RDX | ND | mg/kg | 0.25 |
| 1,3-Dinitrobenzene | ND | mg/kg | 0.25 |
| Nitrobenzene | ND | mg/kg | 0.25 |
| 2,4,6-Trinitrotoluene | ND | mg/kg | 0.25 |
| Tetryl | ND | mg/kg | 0.25 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2-Nitrotoluene | ND | mg/kg | 0.25 |
| 3-Nitrotoluene | ND | mg/kg | 0.25 |
| 4-Nitrotoluene | ND | mg/kg | 0.25 |

ND = Not detected

NA = Not applicable

Reported By: Dennis Gall

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

I-116

Nitroaromatics and Nitramines by HPLC

Enseco
Corning Environmental Service

Method 8330

Client Name: Gram, Inc.

Client ID: 02380001 (2.00,4.00,)

Lab ID: 077507-0007-SA

Matrix: SOIL

Authorized: 03 SEP 94

Sampled: 31 AUG 94
Prepared: 09 SEP 94

Received: 03 SEP 94
Analyzed: 14 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|-----------------------|--------|---------------|-----------------|
| HMX | ND | mg/kg | 0.25 |
| sym-Trinitrobenzene | ND | mg/kg | 0.25 |
| RDX | ND | mg/kg | 0.25 |
| 1,3-Dinitrobenzene | ND | mg/kg | 0.25 |
| Nitrobenzene | ND | mg/kg | 0.25 |
| 2,4,6-Trinitrotoluene | ND | mg/kg | 0.25 |
| Tetryl | ND | mg/kg | 0.25 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2-Nitrotoluene | ND | mg/kg | 0.25 |
| 3-Nitrotoluene | ND | mg/kg | 0.25 |
| 4-Nitrotoluene | ND | mg/kg | 0.25 |

ND = Not detected

NA = Not applicable

Reported By: Dennis Gall

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

I-117

Nitroaromatics and Nitramines by HPLC

Enseco
Corning Environmental Service

Method 8330

Client Name: Gram, Inc.
Client ID: 02880001
Lab ID: 077507-0008-SA
Matrix: SOIL
Authorized: 03 SEP 94

(3.00,6.00,)
Sampled: 31 AUG 94
Prepared: 09 SEP 94

Received: 03 SEP 94
Analyzed: 14 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|-----------------------|--------|------------------|--------------------|
| HMX | ND | mg/kg | 0.25 |
| sym-Trinitrobenzene | ND | mg/kg | 0.25 |
| RDX | ND | mg/kg | 0.25 |
| 1,3-Dinitrobenzene | ND | mg/kg | 0.25 |
| Nitrobenzene | ND | mg/kg | 0.25 |
| 2,4,6-Trinitrotoluene | ND | mg/kg | 0.25 |
| Tetryl | ND | mg/kg | 0.25 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2-Nitrotoluene | ND | mg/kg | 0.25 |
| 3-Nitrotoluene | ND | mg/kg | 0.25 |
| 4-Nitrotoluene | ND | mg/kg | 0.25 |

ND = Not detected
NA = Not applicable

Reported By: Dennis Gall

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

I-118

Nitroaromatics and Nitramines by HPLC

Enseco
Corning Environmental Services

Method 8330

Client Name: Gram, Inc.

Client ID: 02920001 (3.00,6.00,)

Lab ID: 077507-0009-SA

Matrix: SOIL

Authorized: 03 SEP 94

Sampled: 31 AUG 94

Prepared: 09 SEP 94

Received: 03 SEP 94

Analyzed: 14 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|-----------------------|--------|------------------|--------------------|
| HMX | ND | mg/kg | 0.25 |
| sym-Trinitrobenzene | ND | mg/kg | 0.25 |
| RDX | ND | mg/kg | 0.25 |
| 1,3-Dinitrobenzene | ND | mg/kg | 0.25 |
| Nitrobenzene | ND | mg/kg | 0.25 |
| 2,4,6-Trinitrotoluene | ND | mg/kg | 0.25 |
| Tetryl | ND | mg/kg | 0.25 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2-Nitrotoluene | ND | mg/kg | 0.25 |
| 3-Nitrotoluene | ND | mg/kg | 0.25 |
| 4-Nitrotoluene | ND | mg/kg | 0.25 |

ND = Not detected

NA = Not applicable

Reported By: Dennis Gall

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

I-119

Nitroaromatics and Nitramines by HPLC

Enseco
Corning Environmental Services

Method 8330

Client Name: Gram, Inc.
Client ID: 02540001 (2.50,6.00,)
Lab ID: 077507-0010-SA
Matrix: SOIL
Authorized: 03 SEP 94

Sampled: 01 SEP 94
Prepared: 09 SEP 94

Received: 03 SEP 94
Analyzed: 13 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|-----------------------|--------|------------------|--------------------|
| HMX | ND | mg/kg | 0.25 |
| sym-Trinitrobenzene | ND | mg/kg | 0.25 |
| RDX | ND | mg/kg | 0.25 |
| 1,3-Dinitrobenzene | ND | mg/kg | 0.25 |
| Nitrobenzene | ND | mg/kg | 0.25 |
| 2,4,6-Trinitrotoluene | ND | mg/kg | 0.25 |
| Tetryl | ND | mg/kg | 0.25 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2-Nitrotoluene | ND | mg/kg | 0.25 |
| 4-Nitrotoluene | ND | mg/kg | 0.25 |
| 3-Nitrotoluene | ND | mg/kg | 0.25 |

ND = Not detected
NA = Not applicable

Reported By: Dennis Gall

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

1-120

Nitroaromatics and Nitramines by HPLC

Enseco
Corning Environmental Service

Method 8330

Client Name: Gram, Inc.

Client ID: 02550001 (2.50,6.00,)

Lab ID: 077507-0011-SA

Matrix: SOIL

Authorized: 03 SEP 94

Sampled: 01 SEP 94

Prepared: 09 SEP 94

Received: 03 SEP 94

Analyzed: 14 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|-----------------------|--------|---------------|-----------------|
| HMX | ND | mg/kg | 0.25 |
| sym-Trinitrobenzene | ND | mg/kg | 0.25 |
| RDX | ND | mg/kg | 0.25 |
| 1,3-Dinitrobenzene | ND | mg/kg | 0.25 |
| Nitrobenzene | ND | mg/kg | 0.25 |
| 2,4,6-Trinitrotoluene | ND | mg/kg | 0.25 |
| Tetryl | ND | mg/kg | 0.25 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2-Nitrotoluene | ND | mg/kg | 0.25 |
| 4-Nitrotoluene | ND | mg/kg | 0.25 |
| 3-Nitrotoluene | ND | mg/kg | 0.25 |

ND = Not detected

NA = Not applicable

Reported By: Dennis Gall

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

I - 121

Nitroaromatics and Nitramines by HPLC

Enseco
Corning Environmental Service

Method 8330

Client Name: Gram, Inc.

Client ID: 02580001 (2.50,6.00,)

Lab ID: 077507-0012-SA

Matrix: SOIL

Authorized: 03 SEP 94

Sampled: 01 SEP 94

Prepared: 09 SEP 94

Received: 03 SEP 94

Analyzed: 14 SEP 94

| Parameter | Result | Dry Wt. Units | Reporting Limit |
|-----------------------|--------|---------------|-----------------|
| HMX | ND | mg/kg | 0.25 |
| sym-Trinitrobenzene | ND | mg/kg | 0.25 |
| RDX | ND | mg/kg | 0.25 |
| 1,3-Dinitrobenzene | ND | mg/kg | 0.25 |
| Nitrobenzene | ND | mg/kg | 0.25 |
| 2,4,6-Trinitrotoluene | ND | mg/kg | 0.25 |
| Tetryl | ND | mg/kg | 0.25 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2-Nitrotoluene | ND | mg/kg | 0.25 |
| 4-Nitrotoluene | ND | mg/kg | 0.25 |
| 3-Nitrotoluene | ND | mg/kg | 0.25 |

ND = Not detected

NA = Not applicable

Reported By: Dennis Gall

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

I-122

QC LOT ASSIGNMENT REPORT
Special Services - LC Mass Spectrometry

| Laboratory Sample Number | QC Matrix | QC Category | QC Lot Number (DCS) | QC Run Number (SCS/BLANK) |
|--------------------------|-----------|-------------|---------------------|---------------------------|
| 077507-0001-SA | SOIL | 8330-IRP-S | 09 SEP 94-7A | 09 SEP 94-7A |
| 077507-0002-SA | SOIL | 8330-IRP-S | 09 SEP 94-7A | 09 SEP 94-7A |
| 077507-0005-SA | SOIL | 8330-IRP-S | 09 SEP 94-7A | 09 SEP 94-7A |
| 077507-0006-SA | SOIL | 8330-IRP-S | 09 SEP 94-7A | 09 SEP 94-7A |
| 077507-0007-SA | SOIL | 8330-IRP-S | 09 SEP 94-7A | 09 SEP 94-7A |
| 077507-0008-SA | SOIL | 8330-IRP-S | 09 SEP 94-7A | 09 SEP 94-7A |
| 077507-0009-SA | SOIL | 8330-IRP-S | 09 SEP 94-7A | 09 SEP 94-7A |
| 077507-0010-SA | SOIL | 8330-IRP-S | 09 SEP 94-7A | 09 SEP 94-7A |
| 077507-0010-MS | SOIL | 8330-IRP-S | 09 SEP 94-7A | 09 SEP 94-7A |
| 077507-0010-SD | SOIL | 8330-IRP-S | 09 SEP 94-7A | 09 SEP 94-7A |
| 077507-0011-SA | SOIL | 8330-IRP-S | 09 SEP 94-7A | 09 SEP 94-7A |
| 077507-0012-SA | SOIL | 8330-IRP-S | 09 SEP 94-7A | 09 SEP 94-7A |

I-123

METHOD BLANK REPORT
Special Services - LC Mass Spectrometry

| Analyte | Result | Units | Reporting Limit |
|---------|--------|-------|-----------------|
|---------|--------|-------|-----------------|

Test: 8330-IRP-KAFB-1C-S

Matrix: SOIL

QC Lot: 09 SEP 94-7A QC Run: 09 SEP 94-7A

| | | | |
|-----------------------|----|-------|------|
| HMX | ND | mg/kg | 0.25 |
| sym-Trinitrobenzene | ND | mg/kg | 0.25 |
| RDX | ND | mg/kg | 0.25 |
| 1,3-Dinitrobenzene | ND | mg/kg | 0.25 |
| Nitrobenzene | ND | mg/kg | 0.25 |
| 2,4,6-Trinitrotoluene | ND | mg/kg | 0.25 |
| Tetryl | ND | mg/kg | 0.25 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2-Nitrotoluene | ND | mg/kg | 0.25 |
| 3-Nitrotoluene | ND | mg/kg | 0.25 |
| 4-Nitrotoluene | ND | mg/kg | 0.25 |

Test: 8330-IRP-KAFB-1C-S

Matrix: SOIL

QC Lot: 09 SEP 94-7A QC Run: 09 SEP 94-7A

| | | | |
|-----------------------|----|-------|------|
| HMX | ND | mg/kg | 0.25 |
| sym-Trinitrobenzene | ND | mg/kg | 0.25 |
| RDX | ND | mg/kg | 0.25 |
| 1,3-Dinitrobenzene | ND | mg/kg | 0.25 |
| Nitrobenzene | ND | mg/kg | 0.25 |
| 2,4,6-Trinitrotoluene | ND | mg/kg | 0.25 |
| Tetryl | ND | mg/kg | 0.25 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2-Nitrotoluene | ND | mg/kg | 0.25 |
| 3-Nitrotoluene | ND | mg/kg | 0.25 |
| 4-Nitrotoluene | ND | mg/kg | 0.25 |

Test: 8330-IRP-KAFB-1C-S

Matrix: SOIL

QC Lot: 09 SEP 94-7A QC Run: 09 SEP 94-7A

| | | | |
|---------------------|----|-------|------|
| HMX | ND | mg/kg | 0.25 |
| sym-Trinitrobenzene | ND | mg/kg | 0.25 |
| RDX | ND | mg/kg | 0.25 |
| 1,3-Dinitrobenzene | ND | mg/kg | 0.25 |
| Nitrobenzene | ND | mg/kg | 0.25 |

J-124

METHOD BLANK REPORT
Special Services - LC Mass Spectrometry (cont.)

| Analyte | Result | Units | Reporting Limit |
|---|--------|-------|-----------------|
| Test: 8330-IRP-KAFB-1C-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 09 SEP 94-7A QC Run: 09 SEP 94-7A | | | |
| 2,4,6-Trinitrotoluene | ND | mg/kg | 0.25 |
| Tetryl | ND | mg/kg | 0.25 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.25 |
| 2-Nitrotoluene | ND | mg/kg | 0.25 |
| 3-Nitrotoluene | ND | mg/kg | 0.25 |
| 4-Nitrotoluene | ND | mg/kg | 0.25 |

I-125

LABORATORY CONTROL SAMPLE REPORT
Special Services - LC Mass Spectrometry

| Analyte | Concentration | | Accuracy(%) | | |
|--|---------------|----------|-------------|--------|--|
| | Spiked | Measured | | | |
| Category: 8330-IRP-S Explosives by HPLC | | | | | |
| Matrix: SOIL | | | | | |
| QC Lot: 09 SEP 94-7A QC Run: 09 SEP 94-7A | | | | | |
| Concentration Units: mg/kg | | | | | |
| HMX | 1.00 | 0.931 | 93 | 75-107 | |
| sym-Trinitrobenzene | 1.00 | 0.927 | 93 | 65-135 | |
| RDX | 1.00 | 0.916 | 92 | 70-99 | |
| 1,3-Dinitrobenzene | 1.00 | 0.888 | 89 | 74-99 | |
| Nitrobenzene | 1.00 | 0.856 | 86 | 71-95 | |
| 2,4,6-Trinitrotoluene | 1.00 | 0.817 | 82 | 75-107 | |
| Tetryl | 1.00 | 0.727 | 73 | 65-135 | |
| 2,4-Dinitrotoluene | 1.00 | 0.964 | 96 | 72-106 | |
| 2,6-Dinitrotoluene | 1.00 | 0.964 | 96 | 66-102 | |
| 2-Am-DNT | 1.00 | 0.957 | 96 | 77-101 | |
| 4-Am-DNT | 1.00 | 0.961 | 96 | 77-108 | |
| 2-Nitrotoluene | 1.00 | 0.948 | 95 | 72-97 | |
| 4-Nitrotoluene | 1.00 | 0.979 | 98 | 67-110 | |
| 3-Nitrotoluene | 1.00 | 0.970 | 97 | 75-104 | |

ND = Not Detected

Calculations are performed before rounding to avoid round-off errors in calculated results.

7-126

MATRIX SPECIFIC QC
ASSIGNMENT REPORT
Special Services - LC Mass Spectrometry

| QC SAMPLE TYPE | TEST | LABORATORY SAMPLE NUMBER | QC LOT |
|------------------------|--------------------|-----------------------------|--------------|
| MATRIX SPIKE DUPLICATE | 8330-IRP-KAFB-1C-S | 077507-0010-SD | 09 SEP 94-7A |
| MATRIX SPIKE | 8330-IRP-KAFB-1C-S | 077507-0010-MS | 09 SEP 94-7A |

I-67

MATRIX SPIKE / MATRIX SPIKE DUPLICATE REPORT
Special Services - LC Mass Spectrometry

| Analyte | Sample | Concentration | | | Spiked MS | %MS | %MSD | %Recovery | % RPD |
|---------------------------------|--------|-----------------|-----------------|-----------|--------------|-----|------|-----------|----------|
| | | Matrix Spike | Matrix Spike | Spike Dup | | | | | |
| Test: 8330-IRP-KAFB-1C-S | | | | | | | | | |
| Matrix SOIL | | | | | | | | | |
| Sample: 077507-0010 | | | | | | | | | |
| Units: mg/kg | | | | | | | | | |
| HMX | ND | 0.96 | 0.89 | 1.0 | 1.0 | 96 | 89 | 89 | 8 |
| sym-Trinitrobenzene | ND | 0.94 | 0.91 | 1.0 | 1.0 | 95 | 91 | 83 | 9 |
| RDX | ND | 0.91 | 0.83 | 1.0 | 1.0 | 91 | 84 | 84 | 9 |
| 1,3-Dinitrobenzene | ND | 0.92 | 0.84 | 1.0 | 1.0 | 92 | 84 | 81 | 13 |
| Nitrobenzene | ND | 0.92 | 0.81 | 1.0 | 1.0 | 92 | 88 | 84 | 5 |
| 2,4,6-Trinitrotoluene | ND | 0.84 | 0.88 | 1.0 | 1.0 | 84 | 88 | 124 | 44 |
| Tetryl | ND | 0.79 | 1.2 | 1.0 | 1.0 | 79 | 89 | 97 | 9 |
| 2,4-Dinitrotoluene | ND | 0.97 | 0.89 | 1.0 | 1.0 | 97 | 90 | 97 | 8 |
| 2,6-Dinitrotoluene | ND | 0.97 | 0.90 | 1.0 | 1.0 | 97 | 87 | 90 | 11 |
| 2-Nitrotoluene | ND | 0.97 | 0.87 | 1.0 | 1.0 | 97 | 87 | 87 | 11 |
| 3-Nitrotoluene | ND | 0.98 | 0.87 | 1.0 | 1.0 | 98 | 89 | 99 | 10 |
| 4-Nitrotoluene | ND | 0.99 | 0.89 | 1.0 | 1.0 | 99 | 89 | 89 | 10 |

ND = Not detected.

NC = Not calculated, calculation not applicable.

All calculations are performed before rounding to avoid round-off errors in calculated results.

I-128

Semivolatile Organics

Enseco
Corning Environmental Services

Method 8270

Client Name: Gram, Inc.
 Client ID: 03070001
 Lab ID: 077507-0002-SA
 Matrix: SOIL
 Authorized: 03 SEP 94

(2.00,6.00,)

Sampled: 29 AUG 94
 Prepared: 09 SEP 94

Received: 03 SEP 94
 Analyzed: 21 SEP 94

| Parameter | Result | Dry Weight Reporting Units | Limit |
|------------------------------|--------|----------------------------|-------|
| Acenaphthene | ND | mg/kg | 0.75 |
| Acenaphthylene | ND | mg/kg | 0.75 |
| Anthracene | ND | mg/kg | 0.75 |
| Benzo(a)anthracene | ND | mg/kg | 0.75 |
| Benzo(a)pyrene | ND | mg/kg | 0.75 |
| Benzo(b)fluoranthene | ND | mg/kg | 0.75 |
| Benzo(g,h,i)perylene | ND | mg/kg | 0.75 |
| Benzo(k)fluoranthene | ND | mg/kg | 0.75 |
| Benzoic acid | ND | mg/kg | 1.7 |
| Benzyl alcohol | ND | mg/kg | 1.4 |
| 4-Bromophenyl phenyl ether | ND | mg/kg | 0.75 |
| Butyl benzyl phthalate | ND | mg/kg | 0.75 |
| 4-Chloroaniline | ND | mg/kg | 1.4 |
| 2,2'-Oxybis(I-chloropropane) | ND | mg/kg | 0.75 |
| bis(2-Chloroethoxy)- methane | ND | mg/kg | 0.75 |
| bis(2-Chloroethyl) ether | ND | mg/kg | 0.75 |
| 4-Chloro-3-methylphenol | ND | mg/kg | 1.4 |
| 2-Chloronaphthalene | ND | mg/kg | 0.75 |
| 2-Chlorophenol | ND | mg/kg | 0.35 |
| 4-Chlorophenyl phenyl ether | ND | mg/kg | 0.75 |
| Chrysene | ND | mg/kg | 0.75 |
| Di-n-butyl phthalate | ND | mg/kg | 0.75 |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.75 |
| Dibenzofuran | ND | mg/kg | 0.75 |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.75 |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.75 |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.75 |
| 3,3'-Dichlorobenzidine | ND | mg/kg | 1.4 |
| 2,4-Dichlorophenol | ND | mg/kg | 0.35 |
| Diethyl phthalate | ND | mg/kg | 0.75 |
| 2,4-Dimethylphenol | ND | mg/kg | 0.35 |
| Dimethyl phthalate | ND | mg/kg | 0.75 |
| 4,6-Dinitro- 2-methylphenol | ND | mg/kg | 3.5 |
| 2,4-Dinitrophenol | ND | mg/kg | 3.5 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.75 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.75 |
| Di-n-octyl phthalate | ND | mg/kg | 0.75 |

(continued on following page)

ND = Not detected

NA = Not applicable

Reported By: Chris Jenkins

Approved By: Steve Rogers

The cover letter is an integral part of this report.

Rev 230787

I-129

Semivolatile Organics

Method 8270

Client Name: Gram, Inc.
Client ID: 03070001
Lab ID: 077507-0002-SA
Matrix: SOIL
Authorized: 03 SEP 94

(2.00,6.00,)

Sampled: 29 AUG 94
Prepared: 09 SEP 94

Received: 03 SEP 94
Analyzed: 21 SEP 94

| Parameter | Result | Dry Weight Units | Reporting Limit |
|-----------------------------|--------|------------------|-----------------|
| bis(2-Ethylhexyl)-phthalate | ND | mg/kg | 0.75 |
| Fluoranthene | ND | mg/kg | 0.75 |
| Fluorene | ND | mg/kg | 0.75 |
| Hexachlorobenzene | ND | mg/kg | 0.75 |
| Hexachlorobutadiene | ND | mg/kg | 0.75 |
| Hexachlorocyclopentadiene | ND | mg/kg | 0.75 |
| Hexachloroethane | ND | mg/kg | 0.75 |
| Indeno(1,2,3-cd)pyrene | ND | mg/kg | 0.75 |
| Isophorone | ND | mg/kg | 0.75 |
| 2-Methylnaphthalene | ND | mg/kg | 0.75 |
| 2-Methylphenol | ND | mg/kg | 0.35 |
| 4-Methylphenol | ND | mg/kg | 0.35 |
| Naphthalene | ND | mg/kg | 0.75 |
| 2-Nitroaniline | ND | mg/kg | 3.5 |
| 3-Nitroaniline | ND | mg/kg | 3.5 |
| 4-Nitroaniline | ND | mg/kg | 3.5 |
| Nitrobenzene | ND | mg/kg | 0.75 |
| 2-Nitrophenol | ND | mg/kg | 0.35 |
| 4-Nitrophenol | ND | mg/kg | 1.7 |
| N-Nitrosodiphenylamine | ND | mg/kg | 0.75 |
| N-Nitroso-di-n-propylamine | ND | mg/kg | 0.75 |
| Pentachlorophenol | ND | mg/kg | 3.5 |
| Phenanthrene | ND | mg/kg | 0.75 |
| Phenol | ND | mg/kg | 0.35 |
| Pyrene | ND | mg/kg | 0.75 |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.75 |
| 2,4,5-Trichlorophenol | ND | mg/kg | 3.5 |
| 2,4,6-Trichlorophenol | ND | mg/kg | 0.35 |
| Surrogate | | Recovery | |
| Nitrobenzene-d5 | 98 | % | |
| 2-Fluorobiphenyl | 104 | % | |
| Terphenyl-d14 | 125 | % | |
| Phenol-d5 | 84 | % | |
| 2-Fluorophenol | 50 | % | |
| 2,4,6-Tribromophenol | 33 | % | |

Percent Moisture is 7%. All results and limits are reported on a dry weight basis.

ND = Not detected

NA = Not applicable

Reported By: Chris Jenkins

Approved By: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

I-130

Semivolatiles Library Search (20 Compound ID)

Method 8270

| Parameter | Result | Units | Reporting Limit |
|---------------------------------|--------|-------|-----------------|
| Unknown Oxygenated Compound | 610 | ug/Kg | |
| Unknown Ketone | 1500 | ug/Kg | b |
| Unknown Oxygenated Compound | 930 | ug/Kg | b |
| Unknown Oxygenated Compound | 440 | ug/Kg | b |
| Unknown Halogenated | 590 | ug/kg | |
| 1,3-Cyclopentanedione, 2-Bromo- | 190 | ug/kg | or isomer |
| Unknown | 170 | ug/Kg | |
| Unknown | 330 | ug/Kg | |

b : Compound found in the method blank

I-131

Semivolatile Organics

Method 8270

Client Name: Gram, Inc.
Client ID: 02710001
Lab ID: 077507-0003-SA
Matrix: SOIL
Authorized: 03 SEP 94

Sampled: 30 AUG 94
Prepared: 09 SEP 94

Received: 03 SEP 94
Analyzed: 20 SEP 94

| Parameter | Result | Dry Weight Units | Reporting Limit |
|---|--------|------------------|-----------------|
| Acenaphthene | ND | mg/kg | 0.74 |
| Acenaphthylene | ND | mg/kg | 0.74 |
| Anthracene | ND | mg/kg | 0.74 |
| Benzo(a)anthracene | ND | mg/kg | 0.74 |
| Benzo(a)pyrene | ND | mg/kg | 0.74 |
| Benzo(b)fluoranthene | ND | mg/kg | 0.74 |
| Benzo(g,h,i)perylene | ND | mg/kg | 0.74 |
| Benzo(k)fluoranthene | ND | mg/kg | 0.74 |
| Benzoic acid | ND | mg/kg | 1.7 |
| Benzyl alcohol | ND | mg/kg | 1.4 |
| 4-Bromophenyl phenyl ether | ND | mg/kg | 0.74 |
| Butyl benzyl phthalate | ND | mg/kg | 0.74 |
| 4-Chloroaniline | ND | mg/kg | 1.4 |
| 2,2'-Oxybis(1-chloropropane) bis(2-Chloroethoxy)- | ND | mg/kg | 0.74 |
| methane | ND | mg/kg | 0.74 |
| bis(2-Chloroethyl) ether | ND | mg/kg | 0.74 |
| 4-Chloro-3-methylphenol | ND | mg/kg | 1.4 |
| 2-Chloronaphthalene | ND | mg/kg | 0.74 |
| 2-Chlorophenol | ND | mg/kg | 0.35 |
| 4-Chlorophenyl phenyl ether | ND | mg/kg | 0.74 |
| Chrysene | ND | mg/kg | 0.74 |
| Di-n-butyl phthalate | ND | mg/kg | 0.74 |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.74 |
| Dibenzofuran | ND | mg/kg | 0.74 |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.74 |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.74 |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.74 |
| 3,3'-Dichlorobenzidine | ND | mg/kg | 1.4 |
| 2,4-Dichlorophenol | ND | mg/kg | 0.35 |
| Diethyl phthalate | ND | mg/kg | 0.74 |
| 2,4-Dimethylphenol | ND | mg/kg | 0.35 |
| Dimethyl phthalate | ND | mg/kg | 0.74 |
| 4,6-Dinitro-2-methylphenol | ND | mg/kg | 3.5 |
| 2,4-Dinitrophenol | ND | mg/kg | 3.5 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.74 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.74 |
| Di-n-octyl phthalate | ND | mg/kg | 0.74 |

(continued on following page)

ND = Not detected
NA = Not applicable

Reported By: Donald Taylor

Approved By: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

I-132

Semivolatile Organics

Method 8270

Client Name: Gram, Inc.
Client ID: 02710001
Lab ID: 077507-0003-SA
Matrix: SOIL
Authorized: 03 SEP 94

(3.00,6.00,)

Sampled: 30 AUG 94
Prepared: 09 SEP 94

Received: 03 SEP 94
Analyzed: 20 SEP 94

| Parameter | Result | Dry Weight Reporting Units | Reporting Limit |
|-----------------------------|--------|----------------------------|-----------------|
| bis(2-Ethylhexyl)-phthalate | ND | mg/kg | 0.74 |
| Fluoranthene | ND | mg/kg | 0.74 |
| Fluorene | ND | mg/kg | 0.74 |
| Hexachlorobenzene | ND | mg/kg | 0.74 |
| Hexachlorobutadiene | ND | mg/kg | 0.74 |
| Hexachlorocyclopentadiene | ND | mg/kg | 0.74 |
| Hexachloroethane | ND | mg/kg | 0.74 |
| Indeno(1,2,3-cd)pyrene | ND | mg/kg | 0.74 |
| Isophorone | ND | mg/kg | 0.74 |
| 2-Methylnaphthalene | ND | mg/kg | 0.74 |
| 2-Methylphenol | ND | mg/kg | 0.35 |
| 4-Methylphenol | ND | mg/kg | 0.35 |
| Naphthalene | ND | mg/kg | 0.74 |
| 2-Nitroaniline | ND | mg/kg | 3.5 |
| 3-Nitroaniline | ND | mg/kg | 3.5 |
| 4-Nitroaniline | ND | mg/kg | 3.5 |
| Nitrobenzene | ND | mg/kg | 0.74 |
| 2-Nitrophenol | ND | mg/kg | 0.35 |
| 4-Nitrophenol | ND | mg/kg | 1.7 |
| N-Nitrosodiphenylamine | ND | mg/kg | 0.74 |
| N-Nitroso-di-n-propylamine | ND | mg/kg | 0.74 |
| Pentachlorophenol | ND | mg/kg | 3.5 |
| Phenanthrene | ND | mg/kg | 0.74 |
| Phenol | ND | mg/kg | 0.35 |
| Pyrene | ND | mg/kg | 0.74 |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.74 |
| 2,4,5-Trichlorophenol | ND | mg/kg | 3.5 |
| 2,4,6-Trichlorophenol | ND | mg/kg | 0.35 |
| Surrogate | | Recovery | |
| Nitrobenzene-d5 | 80 | % | |
| 2-Fluorobiphenyl | 88 | % | |
| Terphenyl-d14 | 126 | % | |
| Phenol-d5 | 75 | % | |
| 2-Fluorophenol | 49 | % | |
| 2,4,6-Tribromophenol | 46 | % | |

Percent Moisture is 5%. All results and limits are reported on a dry weight basis.

ND = Not detected

NA = Not applicable

Reported By: Donald Taylor

Approved By: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

I - 133

Semivolatiles Library Search (20 Compound ID)

Method 8270

Client Name: Gram, Inc.

Client Name: glam, Inc.
Client ID: 02710001 (2.00,6.00,)

Lab ID: 077507-003-SA

Lab ID: 077507-003-SA Sampled: 30 AUG 94 Received: 03 SEP 94
Matrix: SOIL

Matrix: SOIL Sampled: 30 Aug 94 Received: 10 Sep 94
Authorized: 03 SEP 94 Prepared: 09 SEP 94 Analyzed: 20 SEP 94

Authorized: 03 SEP 94

Sampled: 30 AUG 94

Received: 03 SEP 94

Sampled: 30 AUG 94
Prepared: 09 SEP 94

Analyzed: 20 SEP 94

| Parameter | Result | Units | Reporting Limit |
|--|--------|-------|-----------------|
| Unknown Oxygenated Compound | 510 | ug/Kg | b |
| Unknown Ketone | 740 | ug/Kg | b |
| Unknown Oxygenated Compound | 280 | ug/Kg | b |
| Unknown Halogenated | 410 | ug/Kg | |
| Propanoic Acid, 2-Methyl-, 1-(1-Dimethylethyl)-2-methyl- | 210 | ug/Kg | or isomer |
| Unknown | 220 | ug/Kg | b |
| Unknown alkane | 400 | ug/Kg | |
| Ergost-5-EN-3-OL, (3.BETA.)- | 150 | ug/Kg | or isomer |
| Unknown | 270 | ug/Kg | |

b : Compound found in the method blank

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Semivolatile Organics

Method 8270

Client Name: Gram, Inc.
Client ID: 02730001
Lab ID: 077507-0004-SA
Matrix: SOIL
Authorized: 03 SEP 94

(3.00, 6.00,)

Sampled: 30 AUG 94
Prepared: 09 SEP 94

Received: 03 SEP 94
Analyzed: 20 SEP 94

| Parameter | Result | Dry Weight Reporting Units | Limit |
|------------------------------|--------|----------------------------|-------|
| Acenaphthene | ND | mg/kg | 0.73 |
| Acenaphthylene | ND | mg/kg | 0.73 |
| Anthracene | ND | mg/kg | 0.73 |
| Benzo(a)anthracene | ND | mg/kg | 0.73 |
| Benzo(a)pyrene | ND | mg/kg | 0.73 |
| Benzo(b)fluoranthene | ND | mg/kg | 0.73 |
| Benzo(g,h,i)perylene | ND | mg/kg | 0.73 |
| Benzo(k)fluoranthene | ND | mg/kg | 0.73 |
| Benzoic acid | ND | mg/kg | 1.7 |
| Benzyl alcohol | ND | mg/kg | 1.3 |
| 4-Bromophenyl phenyl ether | ND | mg/kg | 0.73 |
| Butyl benzyl phthalate | ND | mg/kg | 0.73 |
| 4-Chloroaniline | ND | mg/kg | 1.3 |
| 2,2'-Oxybis(1-chloropropane) | ND | mg/kg | 0.73 |
| bis(2-Chloroethoxy)-methane | ND | mg/kg | 0.73 |
| bis(2-Chloroethyl) ether | ND | mg/kg | 0.73 |
| 4-Chloro-3-methylphenol | ND | mg/kg | 1.3 |
| 2-Chloronaphthalene | ND | mg/kg | 0.73 |
| 2-Chlorophenol | ND | mg/kg | 0.34 |
| 4-Chlorophenyl phenyl ether | ND | mg/kg | 0.73 |
| Chrysene | ND | mg/kg | 0.73 |
| Di-n-butyl phthalate | ND | mg/kg | 0.73 |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.73 |
| Dibenzofuran | ND | mg/kg | 0.73 |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.73 |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.73 |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.73 |
| 3,3'-Dichlorobenzidine | ND | mg/kg | 1.3 |
| 2,4-Dichlorophenol | ND | mg/kg | 0.34 |
| Diethyl phthalate | ND | mg/kg | 0.73 |
| 2,4-Dimethylphenol | ND | mg/kg | 0.34 |
| Dimethyl phthalate | ND | mg/kg | 0.73 |
| 4,6-Dinitro-2-methylphenol | ND | mg/kg | 3.4 |
| 2,4-Dinitrophenol | ND | mg/kg | 3.4 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.73 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.73 |
| Di-n-octyl phthalate | ND | mg/kg | 0.73 |

(continued on following page)

ND = Not detected

NA = Not applicable

Reported By: Donald Taylor

Approved By: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

1-135

Semivolatile Organics

Enseco
Corning Environmental Services

Method 8270

Client Name: Gram, Inc.

Client ID: 02730001 (3.00,6.00,)

Lab ID: 077507-0004-SA

Matrix: SOIL

Authorized: 03 SEP 94

Sampled: 30 AUG 94

Received: 03 SEP 94

Prepared: 09 SEP 94

Analyzed: 20 SEP 94

| Parameter | Result | Dry Weight Reporting Units | Reporting Limit |
|-----------------------------|--------|----------------------------|-----------------|
| bis(2-Ethylhexyl)-phthalate | ND | mg/kg | 0.73 |
| Fluoranthene | ND | mg/kg | 0.73 |
| Fluorene | ND | mg/kg | 0.73 |
| Hexachlorobenzene | ND | mg/kg | 0.73 |
| Hexachlorobutadiene | ND | mg/kg | 0.73 |
| Hexachlorocyclopentadiene | ND | mg/kg | 0.73 |
| Hexachloroethane | ND | mg/kg | 0.73 |
| Indeno(1,2,3-cd)pyrene | ND | mg/kg | 0.73 |
| Isophorone | ND | mg/kg | 0.73 |
| 2-Methylnaphthalene | ND | mg/kg | 0.73 |
| 2-Methylphenol | ND | mg/kg | 0.34 |
| 4-Methylphenol | ND | mg/kg | 0.34 |
| Naphthalene | ND | mg/kg | 0.73 |
| 2-Nitroaniline | ND | mg/kg | 3.4 |
| 3-Nitroaniline | ND | mg/kg | 3.4 |
| 4-Nitroaniline | ND | mg/kg | 3.4 |
| Nitrobenzene | ND | mg/kg | 0.73 |
| 2-Nitrophenol | ND | mg/kg | 0.34 |
| 4-Nitrophenol | ND | mg/kg | 1.7 |
| N-Nitrosodiphenylamine | ND | mg/kg | 0.73 |
| N-Nitroso-di-n-propylamine | ND | mg/kg | 0.73 |
| Pentachlorophenol | ND | mg/kg | 3.4 |
| Phenanthrene | ND | mg/kg | 0.73 |
| Phenol | ND | mg/kg | 0.34 |
| Pyrene | ND | mg/kg | 0.73 |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.73 |
| 2,4,5-Trichlorophenol | ND | mg/kg | 3.4 |
| 2,4,6-Trichlorophenol | ND | mg/kg | 0.34 |
| Surrogate | | Recovery | |
| Nitrobenzene-d5 | 80 | % | |
| 2-Fluorobiphenyl | 78 | % | |
| Terphenyl-d14 | 124 | % | |
| Phenol-d5 | 72 | % | |
| 2-Fluorophenol | 58 | % | |
| 2,4,6-Tribromophenol | 40 | % | |

Percent Moisture is 4%. All results and limits are reported on a dry weight basis.

ND = Not detected

NA = Not applicable

Reported By: Donald Taylor

Approved By: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

I-136

Semivolatiles Library Search (20 Compound ID)

Method 8270

Client Name: Gram, Inc.

Client ID: 02730001 (3.00,6.00,)

Lab ID: 077507-004-SA

Matrix: SOIL

Sampled: 30 AUG 94

Received: 03 SEP 94

Authorized: 03 SEP 94

Prepared: 09 SEP 94

Analyzed: 20 SEP 94

| Parameter | Result | Units | Reporting Limit |
|--|--------|-------|-----------------|
| Unknown Oxygenated Compound | 19000 | ug/Kg | b |
| Unknown Oxygenated Compound | 440 | ug/Kg | b |
| Octane, 4-Methyl- | 260 | ug/kg | b |
| Octane, 3-methyl- | 190 | ug/kg | b |
| Unknown Oxygenated Compound | 630 | ug/Kg | b |
| Unknown Ketone | 900 | ug/Kg | b |
| Unknown Oxygenated Compound | 480 | ug/Kg | |
| Unknown Halogenated | 270 | ug/Kg | |
| Propanoic Acid, 2-Methyl-, 1-(1-Dimethylethyl)-2-methyl- | 170 | ug/Kg | or isomer b |
| Pentacosane | 630 | ug/Kg | b |
| Unknown Alkane | 270 | ug/Kg | |

b : Compound found in the method blank

I-137

Semivolatile Organics

Method 8270

Client Name: Gram, Inc.

Client ID: 02310001 (3.00, 6.00,)

Lab ID: 077507-0005-SA

Matrix: SOIL

Authorized: 03 SEP 94

Sampled: 30 AUG 94

Received: 03 SEP 94

Prepared: 09 SEP 94

Analyzed: 20 SEP 94

| Parameter | Result | Dry Weight Reporting Units | Limit |
|------------------------------|--------|----------------------------|-------|
| Acenaphthene | ND | mg/kg | 1.5 |
| Acenaphthylene | ND | mg/kg | 1.5 |
| Anthracene | ND | mg/kg | 1.5 |
| Benzo(a)anthracene | ND | mg/kg | 1.5 |
| Benzo(a)pyrene | ND | mg/kg | 1.5 |
| Benzo(b)fluoranthene | ND | mg/kg | 1.5 |
| Benzo(g,h,i)perylene | ND | mg/kg | 1.5 |
| Benzo(k)fluoranthene | ND | mg/kg | 1.5 |
| Benzoic acid | ND | mg/kg | 3.3 |
| Benzyl alcohol | ND | mg/kg | 2.7 |
| 4-Bromophenyl phenyl ether | ND | mg/kg | 1.5 |
| Butyl benzyl phthalate | ND | mg/kg | 1.5 |
| 4-Chloroaniline | ND | mg/kg | 2.7 |
| 2,2'-Oxybis(1-chloropropane) | ND | mg/kg | 1.5 |
| bis(2-Chloroethoxy)-methane | ND | mg/kg | 1.5 |
| bis(2-Chloroethyl) ether | ND | mg/kg | 1.5 |
| 4-Chloro-3-methylphenol | ND | mg/kg | 2.7 |
| 2-Chloronaphthalene | ND | mg/kg | 1.5 |
| 2-Chlorophenol | ND | mg/kg | 0.69 |
| 4-Chlorophenyl phenyl ether | ND | mg/kg | 1.5 |
| Chrysene | ND | mg/kg | 1.5 |
| Di-n-butyl phthalate | ND | mg/kg | 1.5 |
| Dibenz(a,h)anthracene | ND | mg/kg | 1.5 |
| Dibenzofuran | ND | mg/kg | 1.5 |
| 1,2-Dichlorobenzene | ND | mg/kg | 1.5 |
| 1,3-Dichlorobenzene | ND | mg/kg | 1.5 |
| 1,4-Dichlorobenzene | ND | mg/kg | 1.5 |
| 3,3'-Dichlorobenzidine | ND | mg/kg | 2.7 |
| 2,4-Dichlorophenol | ND | mg/kg | 0.69 |
| Diethyl phthalate | ND | mg/kg | 1.5 |
| 2,4-Dimethylphenol | ND | mg/kg | 0.69 |
| Dimethyl phthalate | ND | mg/kg | 1.5 |
| 4,6-Dinitro-2-methylphenol | ND | mg/kg | 6.9 |
| 2,4-Dinitrophenol | ND | mg/kg | 6.9 |
| 2,4-Dinitrotoluene | ND | mg/kg | 1.5 |
| 2,6-Dinitrotoluene | ND | mg/kg | 1.5 |
| Di-n-octyl phthalate | ND | mg/kg | 1.5 |

(continued on following page)

ND = Not detected

NA = Not applicable

Reported By: Donald Taylor

Approved By: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

7-138

Semivolatile Organics

Method 8270

Client Name: Gram, Inc.
Client ID: 02310001
Lab ID: 077507-0005-SA
Matrix: SOIL
Authorized: 03 SEP 94

(3.00,6.00,)

Sampled: 30 AUG 94
Prepared: 09 SEP 94

Received: 03 SEP 94
Analyzed: 20 SEP 94

| Parameter | Result | Dry Weight Reporting Units | Limit |
|-----------------------------|----------|----------------------------|-------|
| bis(2-Ethylhexyl)-phthalate | ND | mg/kg | 1.5 |
| Fluoranthene | ND | mg/kg | 1.5 |
| Fluorene | ND | mg/kg | 1.5 |
| Hexachlorobenzene | ND | mg/kg | 1.5 |
| Hexachlorobutadiene | ND | mg/kg | 1.5 |
| Hexachlorocyclopentadiene | ND | mg/kg | 1.5 |
| Hexachloroethane | ND | mg/kg | 1.5 |
| Indeno(1,2,3-cd)pyrene | ND | mg/kg | 1.5 |
| Isophorone | ND | mg/kg | 1.5 |
| 2-Methylnaphthalene | ND | mg/kg | 1.5 |
| 2-Methylphenol | ND | mg/kg | 0.69 |
| 4-Methylphenol | ND | mg/kg | 0.69 |
| Naphthalene | ND | mg/kg | 1.5 |
| 2-Nitroaniline | ND | mg/kg | 6.9 |
| 3-Nitroaniline | ND | mg/kg | 6.9 |
| 4-Nitroaniline | ND | mg/kg | 6.9 |
| Nitrobenzene | ND | mg/kg | 1.5 |
| 2-Nitrophenol | ND | mg/kg | 0.69 |
| 4-Nitrophenol | ND | mg/kg | 3.3 |
| N-Nitrosodiphenylamine | ND | mg/kg | 1.5 |
| N-Nitroso-di-n-propylamine | ND | mg/kg | 1.5 |
| Pentachlorophenol | ND | mg/kg | 6.9 |
| Phenanthrene | ND | mg/kg | 1.5 |
| Phenol | ND | mg/kg | 0.69 |
| Pyrene | ND | mg/kg | 1.5 |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 1.5 |
| 2,4,5-Trichlorophenol | ND | mg/kg | 6.9 |
| 2,4,6-Trichlorophenol | ND | mg/kg | 0.69 |
| Surrogate | Recovery | | |
| Nitrobenzene-d5 | 90 | % | |
| 2-Fluorobiphenyl | 92 | % | |
| Terphenyl-d14 | 111 | % | |
| Phenol-d5 | 90 | % | |
| 2-Fluorophenol | 88 | % | |
| 2,4,6-Tribromophenol | 75 | % | |

(continued on following page)

ND = Not detected
NA = Not applicable

Reported By: Donald Taylor

Approved By: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

F- 139

Semivolatile Organics

Enseco
Corning Environmental Service

Method 8270

Client Name: Gram, Inc.

Client ID: 02310001 (3.00,6.00,)

Lab ID: 077507-0005-SA

Matrix: SOIL

Authorized: 03 SEP 94

Sampled: 30 AUG 94
Prepared: 09 SEP 94

Received: 03 SEP 94

Analyzed: 20 SEP 94

Percent Moisture is 4%. All results and limits are reported on a dry weight basis.

Note j : All Reporting Limits for this sample raised due to
matrix interferences.

ND = Not detected

NA = Not applicable

Reported By: Donald Taylor

Approved By: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

T-140

Semivolatiles Library Search (20 Compound ID)

Method 8270

Client Name: Gram, Inc.
Client ID: 02310001 (3.00,6.00,)
Lab ID: 077507-005-SA
Matrix: SOIL
Authorized: 03 SEP 94

Sampled: 30 AUG 94 Received: 03 SEP 94
Prepared: 09 SEP 94 Analyzed: 20 SEP 94

| Parameter | Result | Units | Reporting Limit |
|-----------------------------|--------|-------|-----------------|
| Unknown Oxygenated Compound | 14000 | ug/Kg | b |
| Unknown Ketone | 2400 | ug/Kg | b |
| Unknown Oxygenated Compound | 1800 | ug/Kg | b |
| Tetradecane | 1600 | ug/Kg | |
| Unknown Alkane | 1400 | ug/Kg | |
| Pentadecane | 2400 | ug/Kg | |
| Unknown | 930 | ug/Kg | |
| Hexadecane | 3100 | ug/Kg | |
| Unknown Alkane | 2400 | ug/Kg | |
| Heptadecane | 3200 | ug/Kg | |
| Unknown Alkane | 3900 | ug/Kg | |
| Unknown Alkane | 1100 | ug/Kg | |
| Octadecane | 4600 | ug/kg | |
| Unknown Alkane | 4300 | ug/kg | |
| Unknown alkane | 3800 | ug/kg | |
| Eicosane | 3800 | ug/kg | |
| Phenanthrene, 3,6-Dimethyl- | 890 | ug/Kg | or isomer |
| Phenanthrene, 2,5-Dimethyl- | 1200 | ug/kg | or isomer |
| Unknown | 1200 | ug/kg | |
| Unknown Alkane | 3000 | ug/kg | |
| Unknown | 990 | ug/kg | |
| Docosane | 4400 | ug/Kg | |
| Unknown Alkane | 1900 | ug/kg | |
| Tetracosane | 1300 | ug/Kg | |
| Pentacosane | 1200 | ug/kg | |

b : Compound found in the method blank

I-141

Semivolatile Organics

Method 8270

Client Name: Gram, Inc.
 Client ID: 02310002 (3.00,6.00,)
 Lab ID: 077507-0006-SA
 Matrix: SOIL Sampled: 30 AUG 94 Received: 03 SEP 94
 Authorized: 03 SEP 94 Prepared: 09 SEP 94 Analyzed: 20 SEP 94

| Parameter | Result | Dry Weight Reporting Units | Limit |
|------------------------------|--------|----------------------------|-------|
| Acenaphthene | ND | mg/kg | 1.5 |
| Acenaphthylene | ND | mg/kg | 1.5 |
| Anthracene | ND | mg/kg | 1.5 |
| Benzo(a)anthracene | ND | mg/kg | 1.5 |
| Benzo(a)pyrene | ND | mg/kg | 1.5 |
| Benzo(b)fluoranthene | ND | mg/kg | 1.5 |
| Benzo(g,h,i)perylene | ND | mg/kg | 1.5 |
| Benzo(k)fluoranthene | ND | mg/kg | 1.5 |
| Benzoic acid | ND | mg/kg | 3.4 |
| Benzyl alcohol | ND | mg/kg | 2.7 |
| 4-Bromophenyl phenyl ether | ND | mg/kg | 1.5 |
| Butyl benzyl phthalate | ND | mg/kg | 1.5 |
| 4-Chloroaniline | ND | mg/kg | 2.7 |
| 2,2'-Oxybis(1-chloropropane) | ND | mg/kg | 1.5 |
| bis(2-Chloroethoxy)-methane | ND | mg/kg | 1.5 |
| bis(2-Chloroethyl) ether | ND | mg/kg | 1.5 |
| 4-Chloro-3-methylphenol | ND | mg/kg | 2.7 |
| 2-Chloronaphthalene | ND | mg/kg | 1.5 |
| 2-Chlorophenol | ND | mg/kg | 0.69 |
| 4-Chlorophenyl phenyl ether | ND | mg/kg | 1.5 |
| Chrysene | ND | mg/kg | 1.5 |
| Di-n-butyl phthalate | ND | mg/kg | 1.5 |
| Dibenz(a,h)anthracene | ND | mg/kg | 1.5 |
| Dibenzofuran | ND | mg/kg | 1.5 |
| 1,2-Dichlorobenzene | ND | mg/kg | 1.5 |
| 1,3-Dichlorobenzene | ND | mg/kg | 1.5 |
| 1,4-Dichlorobenzene | ND | mg/kg | 1.5 |
| 3,3'-Dichlorobenzidine | ND | mg/kg | 2.7 |
| 2,4-Dichlorophenol | ND | mg/kg | 0.69 |
| Diethyl phthalate | ND | mg/kg | 1.5 |
| 2,4-Dimethylphenol | ND | mg/kg | 0.69 |
| Dimethyl phthalate | ND | mg/kg | 1.5 |
| 4,6-Dinitro-2-methylphenol | ND | mg/kg | 6.9 |
| 2,4-Dinitrophenol | ND | mg/kg | 6.9 |
| 2,4-Dinitrotoluene | ND | mg/kg | 1.5 |
| 2,6-Dinitrotoluene | ND | mg/kg | 1.5 |
| Di-n-octyl phthalate | ND | mg/kg | 1.5 |

(continued on following page)

ND = Not detected

NA = Not applicable

Reported By: Donald Taylor

Approved By: Steve Rogers

The cover letter is an integral part of this report.
 Rev 230787

J-142

Semivolatile Organics

Enseco
Corning Environmental Services

Method 8270

Client Name: Gram, Inc.
Client ID: 02310002
Lab ID: 077507-0006-SA
Matrix: SOIL
Authorized: 03 SEP 94

(3.00, 6.00,)

Sampled: 30 AUG 94
Prepared: 09 SEP 94

Received: 03 SEP 94
Analyzed: 20 SEP 94

| Parameter | Result | Dry Weight Reporting Units | Limit |
|------------------------------|--------|----------------------------|-------|
| bis(2-Ethylhexyl)- phthalate | ND | mg/kg | 1.5 |
| Fluoranthene | ND | mg/kg | 1.5 |
| Fluorene | ND | mg/kg | 1.5 |
| Hexachlorobenzene | ND | mg/kg | 1.5 |
| Hexachlorobutadiene | ND | mg/kg | 1.5 |
| Hexachlorocyclopentadiene | ND | mg/kg | 1.5 |
| Hexachloroethane | ND | mg/kg | 1.5 |
| Indeno(1,2,3-cd)pyrene | ND | mg/kg | 1.5 |
| Isophorone | ND | mg/kg | 1.5 |
| 2-Methylnaphthalene | ND | mg/kg | 1.5 |
| 2-Methylphenol | ND | mg/kg | 0.69 |
| 4-Methylphenol | ND | mg/kg | 0.69 |
| Naphthalene | ND | mg/kg | 1.5 |
| 2-Nitroaniline | ND | mg/kg | 6.9 |
| 3-Nitroaniline | ND | mg/kg | 6.9 |
| 4-Nitroaniline | ND | mg/kg | 6.9 |
| Nitrobenzene | ND | mg/kg | 1.5 |
| 2-Nitrophenol | ND | mg/kg | 0.69 |
| 4-Nitrophenol | ND | mg/kg | 3.4 |
| N-Nitrosodiphenylamine | ND | mg/kg | 1.5 |
| N-Nitroso-di- n-propylamine | ND | mg/kg | 1.5 |
| Pentachlorophenol | ND | mg/kg | 6.9 |
| Phenanthrene | ND | mg/kg | 1.5 |
| Phenol | ND | mg/kg | 0.69 |
| Pyrene | ND | mg/kg | 1.5 |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 1.5 |
| 2,4,5-Trichlorophenol | ND | mg/kg | 6.9 |
| 2,4,6-Trichlorophenol | ND | mg/kg | 0.69 |
| Surrogate | | | |
| Recovery | | | |
| Nitrobenzene-d5 | 106 | % | |
| 2-Fluorobiphenyl | 107 | % | |
| Terphenyl-d14 | 115 | % | |
| Phenol-d5 | 100 | % | |
| 2-Fluorophenol | 101 | % | |
| 2,4,6-Tribromophenol | 84 | % | |

(continued on following page)

ND = Not detected
NA = Not applicable

Reported By: Donald Taylor

Approved By: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

I - 143

Semivolatile Organics

Method 8270

Client Name: Gram, Inc.

Client ID: 02310002 (3.00,6.00,)

Lab ID: 077507-0006-SA

Matrix: SOIL

Authorized: 03 SEP 94

Sampled: 30 AUG 94
Prepared: 09 SEP 94

Received: 03 SEP 94

Analyzed: 20 SEP 94

Percent Moisture is 5%. All results and limits are reported on a dry weight basis.

Note j : All Reporting Limits for this sample raised due to
matrix interferences.

ND = Not detected

NA = Not applicable

Reported By: Donald Taylor

Approved By: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

1-144

Semivolatiles Library Search (20 Compound ID)

Method 8270

Client Name: Gram, Inc.

Client ID: 02310002 (3.00,6.00,)

Lab ID: 077507-006-SA

Matrix: SOIL

Authorized: 03 SEP 94

Sampled: 30 AUG 94

Received: 03 SEP 94

Prepared: 09 SEP 94

Analyzed: 20 SEP 94

| Parameter | Result | Units | Reporting Limit |
|----------------------------------|--------|-------|-----------------|
| Unknown Oxygenated Compound | 9000 | ug/Kg | b |
| Unknown Ketone | 1800 | ug/Kg | b |
| Unknown Oxygenated Compound | 1400 | ug/Kg | |
| Unknown Alkane | 930 | ug/Kg | |
| Pentadecane | 1400 | ug/Kg | |
| Hexadecane | 2300 | ug/kg | |
| Unknown Alkane | 2400 | ug/Kg | |
| Heptadecane | 3100 | ug/Kg | |
| Unknown Alkane | 1400 | ug/Kg | |
| Octadecane | 4000 | ug/Kg | |
| Unknown Alkane | 4100 | ug/Kg | |
| Unknown Alkane | 920 | ug/kg | |
| Unknown Alkane | 3500 | ug/Kg | |
| Eicosane | 3400 | ug/Kg | |
| Cyclooctane, 1,2,5,6-Tetrabromo- | 2000 | ug/kg | or isomer |
| Phenanthrene, 2,7-Dimethyl- | 2200 | ug/kg | or isomer |
| Phenanthrene, 2,5-Dimethyl- | 910 | ug/kg | or isomer |
| Unknown | 1300 | ug/Kg | |
| Unknown Alkane | 2600 | ug/kg | |
| Unknown | 910 | ug/Kg | |
| Unknown Alkane | 4000 | ug/Kg | |
| Unknown Alkane | 1500 | ug/Kg | |
| Tetracosane | 1100 | ug/Kg | |
| Unknown | 1100 | ug/Kg | |
| Pentacosane | 990 | ug/Kg | |

b : Compound found in the method blank

I-1615

Semivolatile Organics

Method 8270

Client Name: Gram, Inc.
Client ID: 02380001
Lab ID: 077507-0007-SA
Matrix: SOIL
Authorized: 03 SEP 94

(2.00,4.00,)

Sampled: 31 AUG 94
Prepared: 09 SEP 94

Received: 03 SEP 94
Analyzed: 20 SEP 94

| Parameter | Result | Dry Weight Reporting Units | Limit |
|------------------------------|--------|----------------------------|-------|
| Acenaphthene | ND | mg/kg | 0.73 |
| Acenaphthylene | ND | mg/kg | 0.73 |
| Anthracene | ND | mg/kg | 0.73 |
| Benzo(a)anthracene | ND | mg/kg | 0.73 |
| Benzo(a)pyrene | ND | mg/kg | 0.73 |
| Benzo(b)fluoranthene | ND | mg/kg | 0.73 |
| Benzo(g,h,i)perylene | ND | mg/kg | 0.73 |
| Benzo(k)fluoranthene | ND | mg/kg | 0.73 |
| Benzoic acid | ND | mg/kg | 1.7 |
| Benzyl alcohol | ND | mg/kg | 1.4 |
| 4-Bromophenyl phenyl ether | ND | mg/kg | 0.73 |
| Butyl benzyl phthalate | ND | mg/kg | 0.73 |
| 4-Chloroaniline | ND | mg/kg | 1.4 |
| 2,2'-Oxybis(1-chloropropane) | ND | mg/kg | 0.73 |
| bis(2-Chloroethoxy)-methane | ND | mg/kg | 0.73 |
| bis(2-Chloroethyl) ether | ND | mg/kg | 0.73 |
| 4-Chloro-3-methylphenol | ND | mg/kg | 1.4 |
| 2-Chloronaphthalene | ND | mg/kg | 0.73 |
| 2-Chlorophenol | ND | mg/kg | 0.35 |
| 4-Chlorophenyl phenyl ether | ND | mg/kg | 0.73 |
| Chrysene | ND | mg/kg | 0.73 |
| Di-n-butyl phthalate | ND | mg/kg | 0.73 |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.73 |
| Dibenzofuran | ND | mg/kg | 0.73 |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.73 |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.73 |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.73 |
| 3,3'-Dichlorobenzidine | ND | mg/kg | 1.4 |
| 2,4-Dichlorophenol | ND | mg/kg | 0.35 |
| Diethyl phthalate | ND | mg/kg | 0.73 |
| 2,4-Dimethylphenol | ND | mg/kg | 0.35 |
| Dimethyl phthalate | ND | mg/kg | 0.73 |
| 4,6-Dinitro-2-methylphenol | ND | mg/kg | 3.5 |
| 2,4-Dinitrophenol | ND | mg/kg | 3.5 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.73 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.73 |
| Di-n-octyl phthalate | ND | mg/kg | 0.73 |

(continued on following page)

ND = Not detected
NA = Not applicable

Reported By: Donald Taylor

Approved By: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

II-146

Semivolatile Organics

Method 8270

Client Name: Gram, Inc.
 Client ID: 02380001 (2.00,4.00,)
 Lab ID: 077507-0007-SA
 Matrix: SOIL
 Authorized: 03 SEP 94 Sampled: 31 AUG 94 Received: 03 SEP 94
 Prepared: 09 SEP 94 Analyzed: 20 SEP 94

| Parameter | Result | Dry Weight Units | Reporting Limit |
|-----------------------------|----------|------------------|-----------------|
| bis(2-Ethylhexyl)-phthalate | ND | mg/kg | 0.73 |
| Fluoranthene | ND | mg/kg | 0.73 |
| Fluorene | ND | mg/kg | 0.73 |
| Hexachlorobenzene | ND | mg/kg | 0.73 |
| Hexachlorobutadiene | ND | mg/kg | 0.73 |
| Hexachlorocyclopentadiene | ND | mg/kg | 0.73 |
| Hexachloroethane | ND | mg/kg | 0.73 |
| Indeno(1,2,3-cd)pyrene | ND | mg/kg | 0.73 |
| Isophorone | ND | mg/kg | 0.73 |
| 2-Methylnaphthalene | ND | mg/kg | 0.73 |
| 2-Methylphenol | ND | mg/kg | 0.35 |
| 4-Methylphenol | ND | mg/kg | 0.35 |
| Naphthalene | ND | mg/kg | 0.73 |
| 2-Nitroaniline | ND | mg/kg | 3.5 |
| 3-Nitroaniline | ND | mg/kg | 3.5 |
| 4-Nitroaniline | ND | mg/kg | 3.5 |
| Nitrobenzene | ND | mg/kg | 0.73 |
| 2-Nitrophenol | ND | mg/kg | 0.35 |
| 4-Nitrophenol | ND | mg/kg | 1.7 |
| N-Nitrosodiphenylamine | ND | mg/kg | 0.73 |
| N-Nitroso-di-n-propylamine | ND | mg/kg | 0.73 |
| Pentachlorophenol | ND | mg/kg | 3.5 |
| Phenanthrene | ND | mg/kg | 0.73 |
| Phenol | ND | mg/kg | 0.35 |
| Pyrene | ND | mg/kg | 0.73 |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.73 |
| 2,4,5-Trichlorophenol | ND | mg/kg | 3.5 |
| 2,4,6-Trichlorophenol | ND | mg/kg | 0.35 |
| Surrogate | Recovery | | |
| Nitrobenzene-d5 | 92 | % | |
| 2-Fluorobiphenyl | 83 | % | |
| Terphenyl-d14 | 137 | % | |
| Phenol-d5 | 83 | % | |
| 2-Fluorophenol | 83 | % | |
| 2,4,6-Tribromophenol | 71 | % | |

Percent Moisture is 5%. All results and limits are reported on a dry weight basis.

ND = Not detected
 NA = Not applicable

Reported By: Donald Taylor

Approved By: Steve Rogers

The cover letter is an integral part of this report.
 Rev 230787

I - 1417

Semivolatiles Library Search (20 Compound ID)

Method 8270

Client Name: Gram, Inc.

Client ID: 02380001 (2.00,4.00,)

Lab ID: 077507-007-SA

Matrix: SOIL

Sampled: 31 AUG 94

Received: 03 SEP 94

Authorized: 03 SEP 94

Prepared: 09 SEP 94

Analyzed: 20 SEP 94

| Parameter | Result | Units | Reporting Limit |
|-----------------------------|--------|-------|-----------------|
| Unknown Oxygenated Compound | 20000 | ug/Kg | b |
| Unknown | 510 | ug/Kg | b |
| Octane, 4-Methyl- | 300 | ug/Kg | b |
| Octane, 3-Methyl- | 210 | ug/Kg | b |
| Unknown Oxygenated Compound | 590 | ug/Kg | b |
| Unknown Lactone | 530 | ug/Kg | |
| Unknown Ketone | 1300 | ug/Kg | b |
| Unknown | 150 | ug/Kg | |
| Unknown Oxygenated Compound | 880 | ug/Kg | |
| Unknown Oxygenated Compound | 740 | ug/Kg | |
| Tetracosane | 150 | ug/Kg | |
| Pentacosane | 690 | ug/kg | |
| Hexacosane | 160 | ug/Kg | |
| Unknown Alkane | 240 | ug/Kg | |
| Unknown Alkane | 160 | ug/kg | |
| Unknown Alkane | 280 | ug/Kg | |
| Unknown | 250 | ug/Kg | |
| Unknown | 140 | ug/Kg | |
| Unknown | 250 | ug/kg | |

b : Compound found in the method blank

7-148

Semivolatile Organics

Method 8270

Client Name: Gram, Inc.
Client ID: 02920001
Lab ID: 077507-0009-SA
Matrix: SOIL
Authorized: 03 SEP 94

(3.00,6.00,)

Sampled: 31 AUG 94
Prepared: 09 SEP 94

Received: 03 SEP 94
Analyzed: 20 SEP 94

| Parameter | Result | Dry Weight Reporting Units | Limit |
|------------------------------|--------|----------------------------|-------|
| Acenaphthene | ND | mg/kg | 0.79 |
| Acenaphthylene | ND | mg/kg | 0.79 |
| Anthracene | ND | mg/kg | 0.79 |
| Benzo(a)anthracene | ND | mg/kg | 0.79 |
| Benzo(a)pyrene | ND | mg/kg | 0.79 |
| Benzo(b)fluoranthene | ND | mg/kg | 0.79 |
| Benzo(g,h,i)perylene | ND | mg/kg | 0.79 |
| Benzo(k)fluoranthene | ND | mg/kg | 0.79 |
| Benzoic acid | ND | mg/kg | 1.8 |
| Benzyl alcohol | ND | mg/kg | 1.5 |
| 4-Bromophenyl phenyl ether | ND | mg/kg | 0.79 |
| Butyl benzyl phthalate | ND | mg/kg | 0.79 |
| 4-Chloroaniline | ND | mg/kg | 1.5 |
| bis(2-Chloroethoxy)-methane | ND | mg/kg | 0.79 |
| 2,2'-Oxybis(1-chloropropane) | ND | mg/kg | 0.79 |
| bis(2-Chloroethyl) ether | ND | mg/kg | 0.79 |
| 4-Chloro-3-methylphenol | ND | mg/kg | 1.5 |
| 2-Chloronaphthalene | ND | mg/kg | 0.79 |
| 2-Chlorophenol | ND | mg/kg | 0.37 |
| 4-Chlorophenyl phenyl ether | ND | mg/kg | 0.79 |
| Chrysene | ND | mg/kg | 0.79 |
| Di-n-butyl phthalate | ND | mg/kg | 0.79 |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.79 |
| Dibenzofuran | ND | mg/kg | 0.79 |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.79 |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.79 |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.79 |
| 3,3'-Dichlorobenzidine | ND | mg/kg | 1.5 |
| 2,4-Dichlorophenol | ND | mg/kg | 0.37 |
| Diethyl phthalate | ND | mg/kg | 0.79 |
| 2,4-Dimethylphenol | ND | mg/kg | 0.37 |
| Dimethyl phthalate | ND | mg/kg | 0.79 |
| 4,6-Dinitro-2-methylphenol | ND | mg/kg | 3.7 |
| 2,4-Dinitrophenol | ND | mg/kg | 3.7 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.79 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.79 |
| Di-n-octyl phthalate | ND | mg/kg | 0.79 |

(continued on following page)

ND = Not detected
NA = Not applicable

Reported By: Donald Taylor

Approved By: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

I - 149

Semivolatile Organics

Enseco
Corning Environmental Services

Method 8270

Client Name: Gram, Inc.

Client ID: 02920001 (3.00,6.00,)

Lab ID: 077507-0009-SA

Matrix: SOIL

Authorized: 03 SEP 94

Sampled: 31 AUG 94

Received: 03 SEP 94

Prepared: 09 SEP 94

Analyzed: 20 SEP 94

| Parameter | Result | Dry Weight Reporting Units | Limit |
|-----------------------------|--------|----------------------------|-------|
| bis(2-Ethylhexyl)-phthalate | ND | mg/kg | 0.79 |
| Fluoranthene | ND | mg/kg | 0.79 |
| Fluorene | ND | mg/kg | 0.79 |
| Hexachlorobenzene | ND | mg/kg | 0.79 |
| Hexachlorobutadiene | ND | mg/kg | 0.79 |
| Hexachlorocyclopentadiene | ND | mg/kg | 0.79 |
| Hexachloroethane | ND | mg/kg | 0.79 |
| Indeno(1,2,3-cd)pyrene | ND | mg/kg | 0.79 |
| Isophorone | ND | mg/kg | 0.79 |
| 2-Methylnaphthalene | ND | mg/kg | 0.79 |
| 2-Methylphenol | ND | mg/kg | 0.37 |
| 4-Methylphenol | ND | mg/kg | 0.37 |
| Naphthalene | ND | mg/kg | 0.79 |
| 2-Nitroaniline | ND | mg/kg | 3.7 |
| 3-Nitroaniline | ND | mg/kg | 3.7 |
| 4-Nitroaniline | ND | mg/kg | 3.7 |
| Nitrobenzene | ND | mg/kg | 0.79 |
| 2-Nitrophenol | ND | mg/kg | 0.37 |
| 4-Nitrophenol | ND | mg/kg | 1.8 |
| N-Nitrosodiphenylamine | ND | mg/kg | 0.79 |
| N-Nitroso-di-n-propylamine | ND | mg/kg | 0.79 |
| Pentachlorophenol | ND | mg/kg | 3.7 |
| Phenanthrene | ND | mg/kg | 0.79 |
| Phenol | ND | mg/kg | 0.37 |
| Pyrene | ND | mg/kg | 0.79 |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.79 |
| 2,4,5-Trichlorophenol | ND | mg/kg | 3.7 |
| 2,4,6-Trichlorophenol | ND | mg/kg | 0.37 |

| Surrogate | Recovery |
|----------------------|----------|
| Nitrobenzene-d5 | 72 |
| 2-Fluorobiphenyl | 69 |
| Terphenyl-d14 | 131 |
| Phenol-d5 | 66 |
| 2-Fluorophenol | 65 |
| 2,4,6-Tribromophenol | 68 |

Surrogate

Recovery

| | | |
|----------------------|-----|---|
| Nitrobenzene-d5 | 72 | % |
| 2-Fluorobiphenyl | 69 | % |
| Terphenyl-d14 | 131 | % |
| Phenol-d5 | 66 | % |
| 2-Fluorophenol | 65 | % |
| 2,4,6-Tribromophenol | 68 | % |

Percent Moisture is 11%. All results and limits are reported on a dry weight basis.

ND = Not detected

NA = Not applicable

Reported By: Donald Taylor

Approved By: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

I-150

Semivolatiles Library Search (20 Compound ID)

Method 8270

Client Name: Gram, Inc.
Client ID: 02920001 (3.00,6.00,)
Lab ID: 077507-009-SA
Matrix: SOIL
Authorized: 03 SEP 94

Sampled: 31 AUG 94 Received: 03 SEP 94
Prepared: 09 SEP 94 Analyzed: 20 SEP 94

| Parameter | Result | Units | Reporting Limit |
|---|--------|-------|-----------------|
| Unknown Oxygenated Compound | 12000 | ug/Kg | b |
| Unknown | 380 | ug/Kg | b |
| Octane, 4-Methyl- | 210 | ug/Kg | b |
| Octane, 3-Methyl- | 150 | ug/Kg | b |
| Unknown Oxygenated Compound | 450 | ug/Kg | b |
| Unknown | 300 | ug/Kg | |
| Unknown Ketone | 470 | ug/Kg | b |
| Unknown Oxygenated Compound | 250 | ug/Kg | |
| Unknown Oxygenated Compound | 190 | ug/Kg | |
| Propanoic Acid, 2-Methyl-, 1-1(1,1-Dimethyl)- | 170 | ug/Kg | or isomer b |
| Unknown | 430 | ug/Kg | |
| Unknown | 150 | ug/Kg | |
| Unknown | 210 | ug/Kg | |

b : Compound found in the method blank

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Semivolatile Organics

Enseco
Corning Environmental Services

Method 8270

Client Name: Gram, Inc.

Client ID: 02540001 (2.50,6.00,)

Lab ID: 077507-0010-SA

Matrix: SOIL

Authorized: 03 SEP 94

Sampled: 01 SEP 94

Prepared: 09 SEP 94

Received: 03 SEP 94

Analyzed: 20 SEP 94

| Parameter | Result | Dry Weight Units | Reporting Limit |
|------------------------------|--------|------------------|-----------------|
| Acenaphthene | ND | mg/kg | 0.79 |
| Acenaphthylene | ND | mg/kg | 0.79 |
| Anthracene | ND | mg/kg | 0.79 |
| Benzo(a)anthracene | ND | mg/kg | 0.79 |
| Benzo(a)pyrene | ND | mg/kg | 0.79 |
| Benzo(b)fluoranthene | ND | mg/kg | 0.79 |
| Benzo(g,h,i)perylene | ND | mg/kg | 0.79 |
| Benzo(k)fluoranthene | ND | mg/kg | 0.79 |
| Benzoic acid | ND | mg/kg | 1.8 |
| Benzyl alcohol | ND | mg/kg | 1.5 |
| 4-Bromophenyl phenyl ether | ND | mg/kg | 0.79 |
| Butyl benzyl phthalate | ND | mg/kg | 0.79 |
| 4-Chloroaniline | ND | mg/kg | 1.5 |
| 2,2'-Oxybis(1-chloropropane) | ND | mg/kg | 0.79 |
| bis(2-Chloroethoxy)-methane | ND | mg/kg | 0.79 |
| bis(2-Chloroethyl) ether | ND | mg/kg | 0.79 |
| 4-Chloro-3-methylphenol | ND | mg/kg | 1.5 |
| 2-Chloronaphthalene | ND | mg/kg | 0.79 |
| 2-Chlorophenol | ND | mg/kg | 0.37 |
| 4-Chlorophenyl phenyl ether | ND | mg/kg | 0.79 |
| Chrysene | ND | mg/kg | 0.79 |
| Di-n-butyl phthalate | ND | mg/kg | 0.79 |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.79 |
| Dibenzofuran | ND | mg/kg | 0.79 |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.79 |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.79 |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.79 |
| 3,3'-Dichlorobenzidine | ND | mg/kg | 1.5 |
| 2,4-Dichlorophenol | ND | mg/kg | 0.37 |
| Diethyl phthalate | ND | mg/kg | 0.79 |
| 2,4-Dimethylphenol | ND | mg/kg | 0.37 |
| Dimethyl phthalate | ND | mg/kg | 0.79 |
| 4,6-Dinitro-2-methylphenol | ND | mg/kg | 3.7 |
| 2,4-Dinitrophenol | ND | mg/kg | 3.7 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.79 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.79 |
| Di-n-octyl phthalate | ND | mg/kg | 0.79 |

(continued on following page)

ND = Not detected

NA = Not applicable

Reported By: Donald Taylor

Approved By: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

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Semivolatile Organics

Method 8270

Client Name: Gram, Inc.
Client ID: 02540001
Lab ID: 077507-0010-SA
Matrix: SOIL
Authorized: 03 SEP 94

(2.50,6.00,)

Sampled: 01 SEP 94
Prepared: 09 SEP 94

Received: 03 SEP 94
Analyzed: 20 SEP 94

| Parameter | Result | Dry Weight Reporting Units | Limit |
|-----------------------------|--------|----------------------------|-------|
| bis(2-Ethylhexyl)-phthalate | ND | mg/kg | 0.79 |
| Fluoranthene | ND | mg/kg | 0.79 |
| Fluorene | ND | mg/kg | 0.79 |
| Hexachlorobenzene | ND | mg/kg | 0.79 |
| Hexachlorobutadiene | ND | mg/kg | 0.79 |
| Hexachlorocyclopentadiene | ND | mg/kg | 0.79 |
| Hexachloroethane | ND | mg/kg | 0.79 |
| Indeno(1,2,3-cd)pyrene | ND | mg/kg | 0.79 |
| Isophorone | ND | mg/kg | 0.79 |
| 2-Methylnaphthalene | ND | mg/kg | 0.79 |
| 2-Methylphenol | ND | mg/kg | 0.37 |
| 4-Methylphenol | ND | mg/kg | 0.37 |
| Naphthalene | ND | mg/kg | 0.79 |
| 2-Nitroaniline | ND | mg/kg | 3.7 |
| 3-Nitroaniline | ND | mg/kg | 3.7 |
| 4-Nitroaniline | ND | mg/kg | 3.7 |
| Nitrobenzene | ND | mg/kg | 0.79 |
| 2-Nitrophenol | ND | mg/kg | 0.37 |
| 4-Nitrophenol | ND | mg/kg | 1.8 |
| N-Nitrosodiphenylamine | ND | mg/kg | 0.79 |
| N-Nitroso-di-n-propylamine | ND | mg/kg | 0.79 |
| Pentachlorophenol | ND | mg/kg | 3.7 |
| Phenanthrene | ND | mg/kg | 0.79 |
| Phenol | ND | mg/kg | 0.37 |
| Pyrene | ND | mg/kg | 0.79 |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.79 |
| 2,4,5-Trichlorophenol | ND | mg/kg | 3.7 |
| 2,4,6-Trichlorophenol | ND | mg/kg | 0.37 |
| Surrogate | | Recovery | |
| Nitrobenzene-d5 | 96 | % | |
| 2-Fluorobiphenyl | 84 | % | |
| Terphenyl-d14 | 117 | % | |
| Phenol-d5 | 76 | % | |
| 2-Fluorophenol | 67 | % | |
| 2,4,6-Tribromophenol | 36 | % | |

Percent Moisture is 11%. All results and limits are reported on a dry weight basis.

ND = Not detected

NA = Not applicable

Reported By: Donald Taylor

Approved By: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

2-153

Semivolatiles Library Search (20 Compound ID)

Method 8270

Client Name: Gram, Inc.

Client ID: 02540001 (2.50,6.00,)

Lab ID: 077507-010-SA

Matrix: SOIL

Sampled: 01 SEP 94

Received: 03 SEP 94

Authorized: 03 SEP 94

Prepared: 09 SEP 94

Analyzed: 20 SEP 94

| Parameter | Result | Units | Reporting Limit |
|-----------------------------|--------|-------|-----------------|
| Unknown Oxygenated Compound | 22000 | ug/Kg | b |
| Unknown | 460 | ug/Kg | b |
| Octane, 4-Methyl- | 340 | ug/Kg | b |
| Octane, 3-Methyl- | 240 | ug/Kg | b |
| Unknown Oxygenated Compound | 690 | ug/Kg | b |
| Unknown Ketone | 1200 | ug/Kg | b |
| Unknown Oxygenated Compound | 320 | ug/Kg | |
| Unknown Oxygenated Compound | 180 | ug/Kg | |
| Unknown Halogenated | 230 | ug/Kg | |
| Unknown | 340 | ug/Kg | b |
| Unknown | 140 | ug/Kg | |

b : Compound found in the method blank

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Semivolatile Organics

Method 8270

Client Name: Gram, Inc.
Client ID: 02550001
Lab ID: 077507-0011-SA
Matrix: SOIL
Authorized: 03 SEP 94

(2.50,6.00,)

Sampled: 01 SEP 94
Prepared: 09 SEP 94

Received: 03 SEP 94
Analyzed: 20 SEP 94

| Parameter | Result | Dry Weight Units | Reporting Limit |
|------------------------------|--------|------------------|-----------------|
| Acenaphthene | ND | mg/kg | 0.78 |
| Acenaphthylene | ND | mg/kg | 0.78 |
| Anthracene | ND | mg/kg | 0.78 |
| Benzo(a)anthracene | ND | mg/kg | 0.78 |
| Benzo(a)pyrene | ND | mg/kg | 0.78 |
| Benzo(b)fluoranthene | ND | mg/kg | 0.78 |
| Benzo(g,h,i)perylene | ND | mg/kg | 0.78 |
| Benzo(k)fluoranthene | ND | mg/kg | 0.78 |
| Benzoic acid | ND | mg/kg | 1.8 |
| Benzyl alcohol | ND | mg/kg | 1.4 |
| 4-Bromophenyl phenyl ether | ND | mg/kg | 0.78 |
| Butyl benzyl phthalate | ND | mg/kg | 0.78 |
| 4-Chloroaniline | ND | mg/kg | 1.4 |
| bis(2-Chloroethoxy)- methane | ND | mg/kg | 0.78 |
| 2,2'-Oxybis(1-chloropropane) | ND | mg/kg | 0.78 |
| bis(2-Chloroethyl) ether | ND | mg/kg | 0.78 |
| 4-Chloro-3-methylphenol | ND | mg/kg | 1.4 |
| 2-Chloronaphthalene | ND | mg/kg | 0.78 |
| 2-Chlorophenol | ND | mg/kg | 0.37 |
| 4-Chlorophenyl phenyl ether | ND | mg/kg | 0.78 |
| Chrysene | ND | mg/kg | 0.78 |
| Di-n-butyl phthalate | ND | mg/kg | 0.78 |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.78 |
| Dibenzofuran | ND | mg/kg | 0.78 |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.78 |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.78 |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.78 |
| 3,3'-Dichlorobenzidine | ND | mg/kg | 1.4 |
| 2,4-Dichlorophenol | ND | mg/kg | 0.37 |
| Diethyl phthalate | ND | mg/kg | 0.78 |
| 2,4-Dimethylphenol | ND | mg/kg | 0.37 |
| Dimethyl phthalate | ND | mg/kg | 0.78 |
| 4,6-Dinitro- 2-methylphenol | ND | mg/kg | 3.7 |
| 2,4-Dinitrophenol | ND | mg/kg | 3.7 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.78 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.78 |
| Di-n-octyl phthalate | ND | mg/kg | 0.78 |

(continued on following page)

ND = Not detected
NA = Not applicable

Reported By: Donald Taylor

Approved By: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

T-155

Semivolatile Organics

Method 8270

Client Name: Gram, Inc.

Client ID: 02550001 (2.50, 6.00,)

Lab ID: 077507-0011-SA

Matrix: SOIL

Authorized: 03 SEP 94

Sampled: 01 SEP 94
Prepared: 09 SEP 94

Received: 03 SEP 94
Analyzed: 20 SEP 94

| Parameter | Result | Dry Weight Reporting Units | Limit |
|-----------------------------|--------|----------------------------|-------|
| bis(2-Ethylhexyl)-phthalate | ND | mg/kg | 0.78 |
| Fluoranthene | ND | mg/kg | 0.78 |
| Fluorene | ND | mg/kg | 0.78 |
| Hexachlorobenzene | ND | mg/kg | 0.78 |
| Hexachlorobutadiene | ND | mg/kg | 0.78 |
| Hexachlorocyclopentadiene | ND | mg/kg | 0.78 |
| Hexachloroethane | ND | mg/kg | 0.78 |
| Indeno(1,2,3-cd)pyrene | ND | mg/kg | 0.78 |
| Isophorone | ND | mg/kg | 0.78 |
| 2-Methylnaphthalene | ND | mg/kg | 0.78 |
| 2-Methylphenol | ND | mg/kg | 0.37 |
| 4-Methylphenol | ND | mg/kg | 0.37 |
| Naphthalene | ND | mg/kg | 0.78 |
| 2-Nitroaniline | ND | mg/kg | 3.7 |
| 3-Nitroaniline | ND | mg/kg | 3.7 |
| 4-Nitroaniline | ND | mg/kg | 3.7 |
| Nitrobenzene | ND | mg/kg | 0.78 |
| 2-Nitrophenol | ND | mg/kg | 0.37 |
| 4-Nitrophenol | ND | mg/kg | 1.8 |
| N-Nitrosodiphenylamine | ND | mg/kg | 0.78 |
| N-Nitroso-di-n-propylamine | ND | mg/kg | 0.78 |
| Pentachlorophenol | ND | mg/kg | 3.7 |
| Phenanthrene | ND | mg/kg | 0.78 |
| Phenol | ND | mg/kg | 0.37 |
| Pyrene | ND | mg/kg | 0.78 |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.78 |
| 2,4,5-Trichlorophenol | ND | mg/kg | 3.7 |
| 2,4,6-Trichlorophenol | ND | mg/kg | 0.37 |
| Surrogate | | Recovery | |
| Nitrobenzene-d5 | 95 | % | |
| 2-Fluorobiphenyl | 88 | % | |
| Terphenyl-d14 | 134 | % | |
| Phenol-d5 | 90 | % | |
| 2-Fluorophenol | 87 | % | |
| 2,4,6-Tribromophenol | 69 | % | |

Percent Moisture is 10%. All results and limits are reported on a dry weight basis.

ND = Not detected

NA = Not applicable

Reported By: Donald Taylor

Approved By: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

I-156

Semivolatiles Library Search (20 Compound ID)

Method 8270

Client Name: Gram, Inc.
Client ID: 02550001 (2.50,6.00,)
Lab ID: 077507-011-SA
Matrix: SOIL
Authorized: 03 SEP 94

Sampled: 01 SEP 94 Received: 03 SEP 94
Prepared: 09 SEP 94 Analyzed: 20 SEP 94

| Parameter | Result | Units | Reporting Limit |
|-----------------------------|--------|-------|-----------------|
| Unknown Oxygenated Compound | 13000 | ug/Kg | b |
| Unknown | 430 | ug/Kg | b |
| Octane, 4-Methyl- | 270 | ug/Kg | b |
| Octane, 3-Methyl- | 190 | ug/Kg | b |
| Unknown Oxygenated Compound | 590 | ug/Kg | b |
| Unknown Lactone | 640 | ug/Kg | |
| Unknown Ketone | 770 | ug/kg | b |
| Unknown Oxygenated Compound | 430 | ug/Kg | |
| Unknown Oxygenated Compound | 230 | ug/Kg | |
| Unknown | 280 | ug/Kg | b |
| Unknown | 220 | ug/Kg | |
| Unknown Alkane | 160 | ug/Kg | |
| Unknown | 160 | ug/Kg | |
| Unknown | 180 | ug/Kg | |
| Unknown | 200 | ug/Kg | |

b : Compound found in the method blank

Semivolatile Organics

Method 8270

Client Name: Gram, Inc.
Client ID: 02580001
Lab ID: 077507-0012-SA
Matrix: SOIL
Authorized: 03 SEP 94

Sampled: 01 SEP 94
Prepared: 09 SEP 94

Received: 03 SEP 94
Analyzed: 20 SEP 94

| Parameter | Result | Dry Weight Reporting Units | Limit |
|------------------------------|--------|----------------------------|-------|
| Acenaphthene | ND | mg/kg | 0.78 |
| Acenaphthylene | ND | mg/kg | 0.78 |
| Anthracene | ND | mg/kg | 0.78 |
| Benzo(a)anthracene | ND | mg/kg | 0.78 |
| Benzo(a)pyrene | ND | mg/kg | 0.78 |
| Benzo(b)fluoranthene | ND | mg/kg | 0.78 |
| Benzo(g,h,i)perylene | ND | mg/kg | 0.78 |
| Benzo(k)fluoranthene | ND | mg/kg | 0.78 |
| Benzoic acid | ND | mg/kg | 1.8 |
| Benzyl alcohol | ND | mg/kg | 1.5 |
| 4-Bromophenyl phenyl ether | ND | mg/kg | 0.78 |
| Butyl benzyl phthalate | ND | mg/kg | 0.78 |
| 4-Chloroaniline | ND | mg/kg | 1.5 |
| bis(2-Chloroethoxy)-methane | ND | mg/kg | 0.78 |
| 2,2'-Oxybis(1-chloropropane) | ND | mg/kg | 0.78 |
| bis(2-Chloroethyl) ether | ND | mg/kg | 0.78 |
| 4-Chloro-3-methylphenol | ND | mg/kg | 1.5 |
| 2-Chloronaphthalene | ND | mg/kg | 0.78 |
| 2-Chlorophenol | ND | mg/kg | 0.37 |
| 4-Chlorophenyl phenyl ether | ND | mg/kg | 0.78 |
| Chrysene | ND | mg/kg | 0.78 |
| Di-n-butyl phthalate | ND | mg/kg | 0.78 |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.78 |
| Dibenzofuran | ND | mg/kg | 0.78 |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.78 |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.78 |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.78 |
| 3,3'-Dichlorobenzidine | ND | mg/kg | 1.5 |
| 2,4-Dichlorophenol | ND | mg/kg | 0.37 |
| Diethyl phthalate | ND | mg/kg | 0.78 |
| 2,4-Dimethylphenol | ND | mg/kg | 0.37 |
| Dimethyl phthalate | ND | mg/kg | 0.78 |
| 4,6-Dinitro-2-methylphenol | ND | mg/kg | 3.7 |
| 2,4-Dinitrophenol | ND | mg/kg | 3.7 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.78 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.78 |
| Di-n-octyl phthalate | ND | mg/kg | 0.78 |

(continued on following page)

ND = Not detected
NA = Not applicable

Reported By: Donald Taylor

Approved By: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

Semivolatile Organics

Method 8270

Client Name: Gram, Inc.
Client ID: 02580001
Lab ID: 077507-0012-SA
Matrix: SOIL
Authorized: 03 SEP 94

(2.50, 6.00,)

Sampled: 01 SEP 94
Prepared: 09 SEP 94

Received: 03 SEP 94
Analyzed: 20 SEP 94

| Parameter | Result | Dry Weight Reporting Units | Limit |
|-----------------------------|----------|----------------------------|-------|
| bis(2-Ethylhexyl)-phthalate | ND | mg/kg | 0.78 |
| Fluoranthene | ND | mg/kg | 0.78 |
| Fluorene | ND | mg/kg | 0.78 |
| Hexachlorobenzene | ND | mg/kg | 0.78 |
| Hexachlorobutadiene | ND | mg/kg | 0.78 |
| Hexachlorocyclopentadiene | ND | mg/kg | 0.78 |
| Hexachloroethane | ND | mg/kg | 0.78 |
| Indeno(1,2,3-cd)pyrene | ND | mg/kg | 0.78 |
| Isophorone | ND | mg/kg | 0.78 |
| 2-Methylnaphthalene | ND | mg/kg | 0.78 |
| 2-Methylphenol | ND | mg/kg | 0.37 |
| 4-Methylphenol | ND | mg/kg | 0.37 |
| Naphthalene | ND | mg/kg | 0.78 |
| 2-Nitroaniline | ND | mg/kg | 3.7 |
| 3-Nitroaniline | ND | mg/kg | 3.7 |
| 4-Nitroaniline | ND | mg/kg | 3.7 |
| Nitrobenzene | ND | mg/kg | 0.78 |
| 2-Nitrophenol | ND | mg/kg | 0.37 |
| 4-Nitrophenol | ND | mg/kg | 1.8 |
| N-Nitrosodiphenylamine | ND | mg/kg | 0.78 |
| N-Nitroso-di-n-propylamine | ND | mg/kg | 0.78 |
| Pentachlorophenol | ND | mg/kg | 3.7 |
| Phenanthrene | ND | mg/kg | 0.78 |
| Phenol | ND | mg/kg | 0.37 |
| Pyrene | ND | mg/kg | 0.78 |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.78 |
| 2,4,5-Trichlorophenol | ND | mg/kg | 3.7 |
| 2,4,6-Trichlorophenol | ND | mg/kg | 0.37 |
| Surrogate | Recovery | | |
| Nitrobenzene-d5 | 89 | % | |
| 2-Fluorobiphenyl | 95 | % | |
| Terphenyl-d14 | 115 | % | |
| Phenol-d5 | 93 | % | |
| 2-Fluorophenol | 81 | % | |
| 2,4,6-Tribromophenol | 82 | % | |

Percent Moisture is 11%. All results and limits are reported on a dry weight basis.

ND = Not detected
NA = Not applicable

Reported By: Donald Taylor

Approved By: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

I-159

Semivolatiles Library Search (20 Compound ID)

Method 8270

Client Name: Gram, Inc.

Client ID: 02580001 (2.50,6.00,)

Lab ID: 077507-012-SA

Matrix: SOIL

Sampled: 01 SEP 94

Received: 03 SEP 94

Authorized: 03 SEP 94

Prepared: 09 SEP 94

Analyzed: 20 SEP 94

| Parameter | Result | Units | Reporting Limit |
|-----------------------------|--------|-------|-----------------|
| Unknown Oxygenated Compound | 450 | ug/Kg | b |
| Unknown Lactone | 510 | ug/kg | |
| Unknown Ketone | 550 | ug/Kg | b |
| Unknown Oxygenated Compound | 640 | ug/Kg | |
| Unknown Oxygenated Compound | 530 | ug/Kg | |
| Unknown Halogenated | 530 | ug/Kg | |
| Unknown | 240 | ug/Kg | b |
| Unknown | 1300 | ug/kg | |
| Unknown | 280 | ug/kg | |
| Unknown | 140 | ug/Kg | |
| Unknown | 400 | ug/kg | |

b : Compound found in the method blank

I-160

QC LOT ASSIGNMENT REPORT
Semivolatile Organics by GC/MS

| Laboratory Sample Number | QC Matrix | QC Category | QC Lot Number (DCS) | QC Run Number (SCS/BLANK) |
|-----------------------------|-----------|-------------|------------------------|------------------------------|
| 077507-0002-SA | SOIL | 8270-IRPSL | 08 SEP 94-11A | 08 SEP 94-11A |
| 077507-0003-SA | SOIL | 8270-IRPSL | 08 SEP 94-11A | 08 SEP 94-11A |
| 077507-0004-SA | SOIL | 8270-IRPSL | 08 SEP 94-11A | 08 SEP 94-11A |
| 077507-0005-SA | SOIL | 8270-IRPSL | 08 SEP 94-11A | 08 SEP 94-11A |
| 077507-0006-SA | SOIL | 8270-IRPSL | 08 SEP 94-11A | 08 SEP 94-11A |
| 077507-0007-SA | SOIL | 8270-IRPSL | 08 SEP 94-11A | 08 SEP 94-11A |
| 077507-0009-SA | SOIL | 8270-IRPSL | 08 SEP 94-11A | 08 SEP 94-11A |
| 077507-0010-SA | SOIL | 8270-IRPSL | 08 SEP 94-11A | 08 SEP 94-11A |
| 077507-0010-MS | SOIL | 8270-IRPSL | 08 SEP 94-11A | 08 SEP 94-11A |
| 077507-0010-SD | SOIL | 8270-IRPSL | 08 SEP 94-11A | 08 SEP 94-11A |
| 077507-0011-SA | SOIL | 8270-IRPSL | 08 SEP 94-11A | 08 SEP 94-11A |
| 077507-0012-SA | SOIL | 8270-IRPSL | 08 SEP 94-11A | 08 SEP 94-11A |

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METHOD BLANK REPORT
Semivolatile Organics by GC/MS

| Analyte | Result | Units | Reporting Limit |
|---|--------|-------|-----------------|
| Test: 8270-IRPMS-L-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 08 SEP 94-11A QC Run: 08 SEP 94-11A | | | |
| Acenaphthene | ND | mg/kg | 0.70 |
| Acenaphthylene | ND | mg/kg | 0.70 |
| Anthracene | ND | mg/kg | 0.70 |
| Benzo(a)anthracene | ND | mg/kg | 0.70 |
| Benzo(a)pyrene | ND | mg/kg | 0.70 |
| Benzo(b)fluoranthene | ND | mg/kg | 0.70 |
| Benzo(g,h,i)perylene | ND | mg/kg | 0.70 |
| Benzo(k)fluoranthene | ND | mg/kg | 1.6 |
| Benzoic acid | ND | mg/kg | 1.3 |
| Benzyl alcohol | ND | mg/kg | |
| 4-Bromophenyl phenyl ether | ND | mg/kg | 0.70 |
| Butyl benzyl phthalate | ND | mg/kg | 0.70 |
| 4-Chloroaniline | ND | mg/kg | 1.3 |
| 2,2'-Oxybis(1-chloropropane) | ND | mg/kg | 0.70 |
| bis(2-Chloroethoxy)-methane | ND | mg/kg | 0.70 |
| bis(2-Chloroethyl) ether | ND | mg/kg | 0.70 |
| 4-Chloro-3-methylphenol | ND | mg/kg | 1.3 |
| 2-Chloronaphthalene | ND | mg/kg | 0.70 |
| 2-Chlorophenol | ND | mg/kg | 0.33 |
| 4-Chlorophenyl phenyl ether | ND | mg/kg | 0.70 |
| Chrysene | ND | mg/kg | 0.70 |
| Di-n-butyl phthalate | ND | mg/kg | 0.70 |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.70 |
| Dibenzofuran | ND | mg/kg | 0.70 |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.70 |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.70 |
| 1,4-Dichlorobenzene | ND | mg/kg | 1.3 |
| 3,3'-Dichlorobenzidine | ND | mg/kg | 0.33 |
| 2,4-Dichlorophenol | ND | mg/kg | 0.70 |
| Diethyl phthalate | ND | mg/kg | 0.33 |
| 2,4-Dimethylphenol | ND | mg/kg | 0.70 |
| Dimethyl phthalate | ND | mg/kg | |
| 4,6-Dinitro-2-methylphenol | ND | mg/kg | 3.3 |
| 2,4-Dinitrophenol | ND | mg/kg | 3.3 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.70 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.70 |
| Di-n-octyl phthalate | ND | mg/kg | 0.70 |

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METHOD BLANK REPORT
Semivolatile Organics by GC/MS (cont.)

| Analyte | Result | Units | Reporting Limit |
|---|--------|-------|-----------------|
| Test: 8270-IRPMS-L-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 08 SEP 94-11A QC Run: 08 SEP 94-11A | | | |
| Benzo(b)fluoranthene | ND | mg/kg | 0.70 |
| Benzo(g,h,i)perylene | ND | mg/kg | 0.70 |
| Benzo(k)fluoranthene | ND | mg/kg | 0.70 |
| Benzoic acid | ND | mg/kg | 1.6 |
| Benzyl alcohol | ND | mg/kg | 1.3 |
| 4-Bromophenyl phenyl ether | ND | mg/kg | 0.70 |
| Butyl benzyl phthalate | ND | mg/kg | 0.70 |
| 4-Chloroaniline | ND | mg/kg | 1.3 |
| 2,2'-Oxybis(1-chloropropane) | ND | mg/kg | 0.70 |
| bis(2-Chloroethoxy)-methane | ND | mg/kg | 0.70 |
| bis(2-Chloroethyl) ether | ND | mg/kg | 0.70 |
| 4-Chloro-3-methylphenol | ND | mg/kg | 1.3 |
| 2-Choronaphthalene | ND | mg/kg | 0.70 |
| 2-Chlorophenol | ND | mg/kg | 0.33 |
| 4-Chlorophenyl phenyl ether | ND | mg/kg | 0.70 |
| Chrysene | ND | mg/kg | 0.70 |
| Di-n-butyl phthalate | ND | mg/kg | 0.70 |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.70 |
| Dibenzofuran | ND | mg/kg | 0.70 |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.70 |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.70 |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.70 |
| 3,3'-Dichlorobenzidine | ND | mg/kg | 1.3 |
| 2,4-Dichlorophenol | ND | mg/kg | 0.33 |
| Diethyl phthalate | ND | mg/kg | 0.70 |
| 2,4-Dimethylphenol | ND | mg/kg | 0.33 |
| Dimethyl phthalate | ND | mg/kg | 0.70 |
| 4,6-Dinitro-2-methylphenol | ND | mg/kg | 3.3 |
| 2,4-Dinitrophenol | ND | mg/kg | 3.3 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.70 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.70 |
| Di-n-octyl phthalate | ND | mg/kg | 0.70 |
| bis(2-Ethylhexyl)-phthalate | ND | mg/kg | 0.70 |
| Fluoranthene | ND | mg/kg | 0.70 |
| Fluorene | ND | mg/kg | 0.70 |
| Hexachlorobenzene | ND | mg/kg | 0.70 |

METHOD BLANK REPORT
Semivolatile Organics by GC/MS (cont.)

| Analyte | Result | Units | Reporting Limit |
|---|--------|-------|-----------------|
| Test: 8270-IRPMS-L-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 08 SEP 94-11A QC Run: 08 SEP 94-11A | | | |
| bis(2-Ethylhexyl)- | | | |
| phthalate | ND | mg/kg | 0.70 |
| Fluoranthene | ND | mg/kg | 0.70 |
| Fluorene | ND | mg/kg | 0.70 |
| Hexachlorobenzene | ND | mg/kg | 0.70 |
| Hexachlorobutadiene | ND | mg/kg | 0.70 |
| Hexachlorocyclopentadiene | ND | mg/kg | 0.70 |
| Hexachloroethane | ND | mg/kg | 0.70 |
| Indeno(1,2,3-cd)pyrene | ND | mg/kg | 0.70 |
| Isophorone | ND | mg/kg | 0.70 |
| 2-Methylnaphthalene | ND | mg/kg | 0.70 |
| 2-Methylphenol | ND | mg/kg | 0.33 |
| 4-Methylphenol | ND | mg/kg | 0.33 |
| Naphthalene | ND | mg/kg | 0.70 |
| 2-Nitroaniline | ND | mg/kg | 3.3 |
| 3-Nitroaniline | ND | mg/kg | 3.3 |
| 4-Nitroaniline | ND | mg/kg | 3.3 |
| Nitrobenzene | ND | mg/kg | 0.70 |
| 2-Nitrophenol | ND | mg/kg | 0.33 |
| 4-Nitrophenol | ND | mg/kg | 1.6 |
| N-Nitrosodiphenylamine | ND | mg/kg | 0.70 |
| N-Nitroso-di- | | | |
| n-propylamine | ND | mg/kg | 0.70 |
| Pentachlorophenol | ND | mg/kg | 3.3 |
| Phenanthrene | ND | mg/kg | 0.70 |
| Phenol | ND | mg/kg | 0.33 |
| Pyrene | ND | mg/kg | 0.70 |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.70 |
| 2,4,5-Trichlorophenol | ND | mg/kg | 3.3 |
| 2,4,6-Trichlorophenol | ND | mg/kg | 0.33 |

Test: 8270-IRPMS-L-S
Matrix: SOIL
QC Lot: 08 SEP 94-11A QC Run: 08 SEP 94-11A

| | | | |
|--------------------|----|-------|------|
| Acenaphthene | ND | mg/kg | 0.70 |
| Acenaphthylene | ND | mg/kg | 0.70 |
| Anthracene | ND | mg/kg | 0.70 |
| Benzo(a)anthracene | ND | mg/kg | 0.70 |
| Benzo(a)pyrene | ND | mg/kg | 0.70 |

METHOD BLANK REPORT
Semivolatile Organics by GC/MS (cont.)

| Analyte | Result | Units | Reporting Limit |
|---|--------|-------|-----------------|
| Test: 8270-IRPMS-L-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 08 SEP 94-11A QC Run: 08 SEP 94-11A | | | |
| Hexachlorobutadiene | ND | mg/kg | 0.70 |
| Hexachlorocyclopentadiene | ND | mg/kg | 0.70 |
| Hexachloroethane | ND | mg/kg | 0.70 |
| Indeno(1,2,3-cd)pyrene | ND | mg/kg | 0.70 |
| Isophorone | ND | mg/kg | 0.70 |
| 2-Methylnaphthalene | ND | mg/kg | 0.70 |
| 2-Methylphenol | ND | mg/kg | 0.33 |
| 4-Methylphenol | ND | mg/kg | 0.33 |
| Naphthalene | ND | mg/kg | 0.70 |
| 2-Nitroaniline | ND | mg/kg | 3.3 |
| 3-Nitroaniline | ND | mg/kg | 3.3 |
| 4-Nitroaniline | ND | mg/kg | 3.3 |
| Nitrobenzene | ND | mg/kg | 0.70 |
| 2-Nitrophenol | ND | mg/kg | 0.33 |
| 4-Nitrophenol | ND | mg/kg | 1.6 |
| N-Nitrosodiphenylamine | ND | mg/kg | 0.70 |
| N-Nitroso-di-n-propylamine | ND | mg/kg | 0.70 |
| Pentachlorophenol | ND | mg/kg | 3.3 |
| Phenanthrene | ND | mg/kg | 0.70 |
| Phenol | ND | mg/kg | 0.33 |
| Pyrene | ND | mg/kg | 0.70 |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.70 |
| 2,4,5-Trichlorophenol | ND | mg/kg | 3.3 |
| 2,4,6-Trichlorophenol | ND | mg/kg | 0.33 |

Test: 8270-IRPMS-L-S
Matrix: SOIL
QC Lot: 08 SEP 94-11A QC Run: 08 SEP 94-11A

| | | | |
|----------------------|----|-------|------|
| Acenaphthene | ND | mg/kg | 0.70 |
| Acenaphthylene | ND | mg/kg | 0.70 |
| Anthracene | ND | mg/kg | 0.70 |
| Benzo(a)anthracene | ND | mg/kg | 0.70 |
| Benzo(a)pyrene | ND | mg/kg | 0.70 |
| Benzo(b)fluoranthene | ND | mg/kg | 0.70 |
| Benzo(g,h,i)perylene | ND | mg/kg | 0.70 |
| Benzo(k)fluoranthene | ND | mg/kg | 0.70 |
| Benzoic acid | ND | mg/kg | 1.6 |
| Benzyl alcohol | ND | mg/kg | 1.3 |

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METHOD BLANK REPORT
Semivolatile Organics by GC/MS (cont.)

| Analyte | Result | Units | Reporting Limit |
|---|--------|-------|-----------------|
| Test: 8270-IRPMS-L-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 08 SEP 94-11A QC Run: 08 SEP 94-11A | | | |
| 4-Bromophenyl phenyl ether | ND | mg/kg | 0.70 |
| Butyl benzyl phthalate | ND | mg/kg | 0.70 |
| 4-Chloroaniline | ND | mg/kg | 1.3 |
| 2,2'-Oxybis(1-chloropropane) | ND | mg/kg | 0.70 |
| bis(2-Chloroethoxy)-methane | ND | mg/kg | 0.70 |
| bis(2-Chloroethyl) ether | ND | mg/kg | 0.70 |
| 4-Chloro-3-methylphenol | ND | mg/kg | 1.3 |
| 2-Chloronaphthalene | ND | mg/kg | 0.70 |
| 2-Chlorophenol | ND | mg/kg | 0.33 |
| 4-Chlorophenyl phenyl ether | ND | mg/kg | 0.70 |
| Chrysene | ND | mg/kg | 0.70 |
| Di-n-butyl phthalate | ND | mg/kg | 0.70 |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.70 |
| Dibenzofuran | ND | mg/kg | 0.70 |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.70 |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.70 |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.70 |
| 3,3'-Dichlorobenzidine | ND | mg/kg | 1.3 |
| 2,4-Dichlorophenol | ND | mg/kg | 0.33 |
| Diethyl phthalate | ND | mg/kg | 0.70 |
| 2,4-Dimethylphenol | ND | mg/kg | 0.33 |
| Dimethyl phthalate | ND | mg/kg | 0.70 |
| 4,6-Dinitro-2-methylphenol | ND | mg/kg | 3.3 |
| 2,4-Dinitrophenol | ND | mg/kg | 3.3 |
| 2,4-Dinitrotoluene | ND | mg/kg | 0.70 |
| 2,6-Dinitrotoluene | ND | mg/kg | 0.70 |
| Di-n-octyl phthalate | ND | mg/kg | 0.70 |
| bis(2-Ethylhexyl)-phthalate | ND | mg/kg | 0.70 |
| Fluoranthene | ND | mg/kg | 0.70 |
| Fluorene | ND | mg/kg | 0.70 |
| Hexachlorobenzene | ND | mg/kg | 0.70 |
| Hexachlorobutadiene | ND | mg/kg | 0.70 |
| Hexachlorocyclopentadiene | ND | mg/kg | 0.70 |
| Hexachloroethane | ND | mg/kg | 0.70 |
| Indeno(1,2,3-cd)pyrene | ND | mg/kg | 0.70 |
| Isophorone | ND | mg/kg | 0.70 |

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METHOD BLANK REPORT
Semivolatile Organics by GC/MS (cont.)

| Analyte | Result | Units | Reporting Limit |
|---|--------|-------|-----------------|
| Test: 8270-IRPMS-L-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 08 SEP 94-11A QC Run: 08 SEP 94-11A | | | |
| 2-Methylnaphthalene | ND | mg/kg | 0.70 |
| 2-Methylphenol | ND | mg/kg | 0.33 |
| 4-Methylphenol | ND | mg/kg | 0.33 |
| Naphthalene | ND | mg/kg | 0.70 |
| 2-Nitroaniline | ND | mg/kg | 3.3 |
| 3-Nitroaniline | ND | mg/kg | 3.3 |
| 4-Nitroaniline | ND | mg/kg | 3.3 |
| Nitrobenzene | ND | mg/kg | 0.70 |
| 2-Nitrophenol | ND | mg/kg | 0.33 |
| 4-Nitrophenol | ND | mg/kg | 1.6 |
| N-Nitrosodiphenylamine | ND | mg/kg | 0.70 |
| N-Nitroso-di-n-propylamine | ND | mg/kg | 0.70 |
| Pentachlorophenol | ND | mg/kg | 3.3 |
| Phenanthrene | ND | mg/kg | 0.70 |
| Phenol | ND | mg/kg | 0.33 |
| Pyrene | ND | mg/kg | 0.70 |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.70 |
| 2,4,5-Trichlorophenol | ND | mg/kg | 3.3 |
| 2,4,6-Trichlorophenol | ND | mg/kg | 0.33 |

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Semivolatiles Library Search (20 Compound ID)

Method 8270

Client Name: Gram, Inc.
Client ID: SBLK2 08SEP94-11A

Lab ID: Method Blank

Matrix: SOIL

Authorized: 30 AUG 94

Sampled: NA

Prepared: 08 SEP 94

Received: NA

Analyzed: 20 SEP 94

| Parameter | Result | Units | Reporting Limit |
|--|--------|-------|-----------------|
| Unknown Oxygenated Compound | 29000 | ug/Kg | |
| Unknown | 560 | ug/Kg | |
| Octane, 4-Methyl- | 450 | ug/Kg | |
| Octane, 3-Methyl- | 310 | ug/Kg | |
| Unknown Oxygenated Compound | 820 | ug/Kg | |
| Unknown Ketone | 140 | ug/kg | |
| Propanoic Acid, 2-Methyl-, 1-(1-Dimethylethyl)-2-methyl- | 210 | ug/Kg | or isomer |
| Unknown Halogenated | 230 | ug/Kg | |
| Unknown | 220 | ug/kg | |

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LABORATORY CONTROL SAMPLE REPORT
Semivolatile Organics by GC/MS

| Analyte | Concentration Spiked | Concentration Measured | Accuracy(%) LCS | Accuracy(%) Limits |
|---|-------------------------|---------------------------|--------------------|-----------------------|
| Category: 8270-IRPSL Semivolatile Organics (Contain all compounds for IRPMS Low soil) | | | | |
| Matrix: SOIL QC Lot: 08 SEP 94-11A QC Run: 08 SEP 94-11A Concentration Units: mg/kg | | | | |
| | | | | |
| Phenol | 6.70 | 5.19 | 77 | 41-123 |
| bis(2-Chloroethyl) ether | 3.30 | 3.26 | 99 | 43-117 |
| 2-Chlorophenol | 6.70 | 4.76 | 71 | 44-116 |
| 1,3-Dichlorobenzene | 3.30 | 2.63 | 80 | 39-106 |
| 1,4-Dichlorobenzene | 3.30 | 2.51 | 76 | 40-106 |
| Benzyl alcohol | 3.30 | 3.96 | 120 | 37-125 |
| 1,2-Dichlorobenzene | 3.30 | 2.55 | 77 | 40-107 |
| 2-Methylphenol | 6.70 | 4.80 | 72 | 44-128 |
| 2,2'-Oxybis(1-chloropropane) | 3.30 | 2.85 | 86 | 38-116 |
| 4-Methylphenol | 6.70 | 5.96 | 89 | 36-138 |
| N-Nitroso-di-n-propylamine | 3.30 | 3.32 | 101 | 43-123 |
| Hexachloroethane | 3.30 | 2.80 | 85 | 39-106 |
| Nitrobenzene | 3.30 | 3.32 | 101 | 35-180 |
| Isophorone | 3.30 | 2.92 | 88 | 20-134 |
| 2-Nitrophenol | 6.70 | 4.92 | 73 | 40-128 |
| 2,4-Dimethylphenol | 6.70 | 5.37 | 80 | 38-127 |
| Benzoic acid | 6.70 | NA | NC | 1-137 |
| bis(2-Chloroethoxy)-methane | 3.30 | 3.47 | 105 | 40-117 |
| 2,4-Dichlorophenol | 6.70 | 4.99 | 74 | 34-129 |
| 1,2,4-Trichlorobenzene | 3.30 | 2.75 | 83 | 36-114 |
| Naphthalene | 3.30 | 2.62 | 79 | 41-108 |
| 4-Chloroaniline | 3.30 | 0.700 | 21 | 0-63 |
| Hexachlorobutadiene | 3.30 | 2.56 | 78 | 33-114 |
| 4-Chloro-3-methylphenol | 6.70 | 6.13 | 91 | 33-143 |
| 2-Methylnaphthalene | 3.30 | 2.82 | 85 | 0-197 |
| Hexachlorocyclopentadiene | 3.30 | 2.39 | 72 | 29-111 |
| 2,4,6-Trichlorophenol | 6.70 | 5.50 | 82 | 41-132 |
| 2,4,5-Trichlorophenol | 6.70 | 4.24 | 63 | 36-129 |
| 2-Chloronaphthalene | 3.30 | 2.71 | 82 | 40-119 |
| 2-Nitroaniline | 3.30 | 3.72 | 113 | 45-129 |
| Dimethyl phthalate | 3.30 | 3.01 | 91 | 48-116 |
| Acenaphthylene | 3.30 | 2.69 | 82 | 43-114 |
| 2,6-Dinitrotoluene | 3.30 | 3.29 | 100 | 44-127 |
| 3-Nitroaniline | 3.30 | 2.36 | 72 | 0-119 |
| Acenaphthene | 3.30 | 2.69 | 82 | 41-113 |
| 2,4-Dinitrophenol | 6.70 | 2.64 | 39 | 0-139 |
| 4-Nitrophenol | 6.70 | 7.21 | 108 | 41-144 |
| Dibenzofuran | 3.30 | 2.83 | 86 | 42-116 |

N = Not Applicable

N = Not Calculated, calculation not applicable.

ND = Not Detected

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE REPORT
Semivolatile Organics by GC/MS

(cont.)

| Analyte | Concentration Spiked | Concentration Measured | Accuracy(%) LCS | (cont.) Limits |
|--|-------------------------|---------------------------|--------------------|-------------------|
| Category: 8270-IRPSL Semivolatile Organics | | | | |
| (Contain all compounds for IRPMS Low soil) | | | | |
| Matrix: SOIL | | | | |
| QC Lot: 08 SEP 94-11A QC Run: 08 SEP 94-11A | | | | |
| Concentration Units: mg/kg | | | | |
| 2,4-Dinitrotoluene | 3.30 | 3.21 | 97 | 43-129 |
| Diethyl phthalate | 3.30 | 2.74 | 83 | 46-118 |
| Fluorene | 3.30 | 2.69 | 82 | 43-117 |
| 4-Chlorophenyl phenyl ether | 3.30 | 2.43 | 74 | 41-120 |
| 4-Nitroaniline | 3.30 | 3.37 | 102 | 0-189 |
| 4,6-Dinitro- 2-methylphenol | 6.70 | 3.82 | 57 | 0-181 |
| N-Nitrosodiphenylamine | 3.30 | 3.12 | 95 | 9-241 |
| 4-Bromophenyl phenyl ether | 3.30 | 2.95 | 89 | 41-126 |
| Hexachlorobenzene | 3.30 | 2.76 | 84 | 40-126 |
| Pentachlorophenol | 6.70 | 5.82 | 87 | 29-137 |
| Phenanthrene | 3.30 | 2.80 | 85 | 54-120 |
| Anthracene | 3.30 | 2.72 | 82 | 46-119 |
| Di-n-butyl phthalate | 3.30 | 3.21 | 97 | 44-130 |
| Fluoranthene | 3.30 | 3.02 | 92 | 44-126 |
| Pyrene | 3.30 | 3.32 | 101 | 52-115 |
| Butyl benzyl phthalate | 3.30 | 3.66 | 111 | 50-131 |
| 3,3'-Dichlorobenzidine | 3.30 | 1.83 | 55 | 7-141 |
| Benzo(a)anthracene | 3.30 | 3.33 | 101 | 48-127 |
| Chrysene | 3.30 | 2.83 | 86 | 49-123 |
| bis(2-Ethylhexyl)- phthalate | 3.30 | 3.57 | 108 | 48-130 |
| Di-n-octyl phthalate | 3.30 | 3.43 | 104 | 44-137 |
| Benzo(b)fluoranthene | 3.30 | 3.86 | 117 | 44-136 |
| Benzo(k)fluoranthene | 3.30 | 2.60 | 79 | 43-127 |
| Benzo(a)pyrene | 3.30 | 3.23 | 98 | 46-132 |
| Indeno(1,2,3-cd)pyrene | 3.30 | 3.58 | 108 | 47-133 |
| Dibenz(a,h)anthracene | 3.30 | 3.60 | 109 | 47-129 |
| Benzo(g,h,i)perylene | 3.30 | 3.53 | 107 | 40-133 |

ND = Not Detected

Calculations are performed before rounding to avoid round-off errors in calculated results.

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SINGLE CONTROL SAMPLE REPORT
Semivolatile Organics by GC/MS

| Analyte | Concentration Spiked | Concentration Measured | Accuracy(%) | SCS | Limits |
|--|-------------------------|---------------------------|-------------|--------|--------|
| Category: 8270-IRPSL | | | | | |
| Matrix: SOIL | | | | | |
| QC Lot: 08 SEP 94-11A QC Run: 08 SEP 94-11A | | | | | |
| Concentration Units: mg/kg | | | | | |
| Nitrobenzene-d5 | 50 | 49 | 97 | 38-116 | |
| 2-Fluorobiphenyl | 50 | 43 | 86 | 42-120 | |
| Terphenyl-d14 | 50 | 58 | 117 | 40-141 | |
| Phenol-d5 | 100 | 86 | 86 | 32-131 | |
| 2-Fluorophenol | 100 | 93 | 93 | 23-184 | |
| 2,4,6-Tribromophenol | 100 | 59 | 59 | 20-109 | |

Calculations are performed before rounding to avoid round-off errors in calculated results.

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MATRIX SPECIFIC QC
ASSIGNMENT REPORT
Semivolatile Organics by GC/MS

| QC SAMPLE TYPE | TEST | LABORATORY SAMPLE NUMBER | QC LOT |
|------------------------|----------------|-----------------------------|---------------|
| MATRIX SPIKE DUPLICATE | 8270-IRPMS-L-S | 077507-0010-SD | 08 SEP 94-11A |
| MATRIX SPIKE | 8270-IRPMS-L-S | 077507-0010-MS | 08 SEP 94-11A |

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MATRIX SPIKE / MATRIX SPIKE DUPLICATE REPORT
Semivolatile Organics by GC/MS

| Analyte | Sample | Concentration | | | | Spiked MS | %Recovery MS | %MS | % RPD |
|------------------------------|--------|---------------|--------------|-----|-----|-----------|--------------|-----|-------|
| | | Matrix Spike | Matrix Spike | Dup | MS | | | | |
| Test: 8270-IRPMS-L-S | | | | | | | | | |
| Matrix SOIL | | | | | | | | | |
| Sample: 077507-0010 | | | | | | | | | |
| Units: mg/kg | | | | | | | | | |
| Acenaphthene | ND | 2.9 | 3.2 | 3.8 | 3.8 | 77 | 86 | 11 | |
| Acenaphthylene | ND | 2.9 | 3.3 | 3.8 | 3.8 | 77 | 88 | 12 | |
| Anthracene | ND | 2.9 | 3.3 | 3.8 | 3.8 | 77 | 87 | 12 | |
| Benzo(a)anthracene | ND | 2.4 | 4.6 | 3.8 | 3.8 | 63 | 121 | 64 | |
| Benzo(a)pyrene | ND | 3.4 | 3.9 | 3.8 | 3.8 | 91 | 102 | 12 | |
| Benzo(b)fluoranthene | ND | 3.3 | 7.3 | 3.8 | 3.8 | 86 | 194 | 77 | |
| Benzo(g,h,i)perylene | ND | 3.8 | 4.4 | 3.8 | 3.8 | 101 | 118 | 16 | |
| Benzo(k)fluoranthene | ND | 3.4 | 3.3 | 3.8 | 3.8 | 90 | 87 | 4 | |
| Benzoic acid | ND | 2.9 | 2.9 | 7.5 | 7.5 | 39 | 39 | 0 | |
| Benzyl alcohol | ND | 3.9 | 4.6 | 3.8 | 3.8 | 105 | 121 | 15 | |
| 4-Bromophenyl phenyl ether | ND | 3.2 | 3.7 | 3.8 | 3.8 | 84 | 99 | 16 | |
| Butyl benzyl phthalate | ND | 4.7 | 5.5 | 3.8 | 3.8 | 125 | 145 | 15 | |
| 4-Chloroaniline | ND | 1.1 | 1.1 | 3.8 | 3.8 | 29 | 29 | 0 | |
| 2,2'-Oxybis(1-chloropropane) | ND | 2.8 | 3.2 | 3.8 | 3.8 | 74 | 84 | 12 | |
| bis(2-Chloroethoxy)-methane | ND | 3.6 | 3.6 | 3.8 | 3.8 | 96 | 96 | 0 | |
| bis(2-Chloroethyl) ether | ND | 3.5 | 3.8 | 3.8 | 3.8 | 93 | 101 | 8 | |
| 4-Chloro-3-methylphenol | ND | 6.6 | 6.6 | 7.5 | 7.5 | 88 | 88 | 0 | |
| 2-Chloronaphthalene | ND | 3.0 | 3.3 | 3.8 | 3.8 | 79 | 88 | 10 | |
| 2-Chlorophenol | ND | 5.1 | 5.7 | 7.5 | 7.5 | 68 | 76 | 10 | |
| 4-Chlorophenyl phenyl ether | ND | 2.8 | 3.1 | 3.8 | 3.8 | 74 | 82 | 10 | |
| Chrysene | ND | 3.3 | 3.5 | 3.8 | 3.8 | 87 | 94 | 8 | |
| Di-n-butyl phthalate | ND | 3.6 | 4.1 | 3.8 | 3.8 | 97 | 108 | 11 | |
| Dibenz(a,h)anthracene | ND | 7.1 | 4.2 | 3.8 | 3.8 | 188 | 111 | 51 | |
| Dibenzofuran | ND | 3.0 | 3.4 | 3.8 | 3.8 | 81 | 91 | 12 | |
| 1,2-Dichlorobenzene | ND | 2.6 | 2.9 | 3.8 | 3.8 | 68 | 78 | 13 | |
| 1,3-Dichlorobenzene | ND | 2.6 | 3.0 | 3.8 | 3.8 | 70 | 79 | 13 | |
| 1,4-Dichlorobenzene | ND | 2.6 | 2.9 | 3.8 | 3.8 | 69 | 77 | 11 | |
| 3,3'-Dichlorobenzidine | ND | 3.9 | 3.0 | 3.8 | 3.8 | 105 | 80 | 26 | |
| 2,4-Dichlorophenol | ND | 5.5 | 5.5 | 7.5 | 7.5 | 73 | 73 | 0 | |
| Diethyl phthalate | ND | 3.1 | 3.4 | 3.8 | 3.8 | 83 | 90 | 9 | |
| 2,4-Dimethylphenol | ND | 6.1 | 6.1 | 7.5 | 7.5 | 81 | 81 | 0 | |
| Dimethyl phthalate | ND | 3.3 | 3.7 | 3.8 | 3.8 | 87 | 99 | 13 | |
| 4,6-Dinitro-2-methylphenol | ND | 4.6 | 5.1 | 7.5 | 7.5 | 61 | 68 | 11 | |
| 2,4-Dinitrophenol | ND | 3.1 | 4.0 | 7.5 | 7.5 | 42 | 53 | 23 | |
| 2,4-Dinitrotoluene | ND | 3.5 | 3.9 | 3.8 | 3.8 | 93 | 105 | 12 | |

ND = Not detected.

NC = Not calculated, calculation not applicable.

All results and spike amounts are reported on a dry weight basis.

All calculations are performed before rounding to avoid round-off errors in calculated results.

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MATRIX SPIKE / MATRIX SPIKE DUPLICATE REPORT
Semivolatile Organics by GC/MS (cont.)

| Analyte | Sample | Concentration | | | Spiked | %Recovery | MS | MSD | MS | MSD | % RPD |
|---------------------------------|--------|-----------------|-----------------|-----|--------|-----------|-----|-----|-----|-----|----------|
| | | Matrix Spike | Matrix Spike | Dup | | | | | | | |
| 2,6-Dinitrotoluene | ND | 3.4 | 3.9 | 3.8 | 3.8 | 90 | 103 | 13 | 103 | 109 | 13 |
| Di-n-octyl phthalate | ND | 3.8 | 4.1 | 3.8 | 3.8 | 100 | 109 | 8 | 109 | 109 | 8 |
| bis(2-Ethylhexyl)- phthalate | ND | 4.4 | 5.1 | 3.8 | 3.8 | 118 | 136 | 14 | 136 | 136 | 14 |
| Fluoranthene | ND | 3.4 | 3.8 | 3.8 | 3.8 | 90 | 101 | 12 | 101 | 101 | 12 |
| Fluorene | ND | 2.9 | 3.3 | 3.8 | 3.8 | 78 | 87 | 11 | 87 | 87 | 11 |
| Hexachlorobenzene | ND | 3.1 | 3.5 | 3.8 | 3.8 | 83 | 92 | 11 | 92 | 92 | 11 |
| Hexachlorobutadiene | ND | 2.7 | 2.7 | 3.8 | 3.8 | 71 | 71 | 0 | 71 | 71 | 0 |
| Hexachlorocyclopentadiene | ND | 2.6 | 2.6 | 3.8 | 3.8 | 68 | 68 | 0 | 68 | 68 | 0 |
| Hexachloroethane | ND | 2.8 | 3.2 | 3.8 | 3.8 | 73 | 85 | 15 | 85 | 85 | 15 |
| Indeno(1,2,3-cd)pyrene | ND | 3.7 | 4.4 | 3.8 | 3.8 | 99 | 117 | 16 | 117 | 117 | 16 |
| Isophorone | ND | 0.68 | 0.68 | 3.8 | 3.8 | 18 | 18 | 0 | 18 | 18 | 0 |
| 2-Methylnaphthalene | ND | 3.1 | 3.1 | 3.8 | 3.8 | 83 | 83 | 0 | 83 | 83 | 0 |
| 2-Methylphenol | ND | 5.3 | 5.8 | 7.5 | 7.5 | 71 | 77 | 9 | 77 | 77 | 9 |
| 4-Methylphenol | ND | 6.7 | 7.9 | 7.5 | 7.5 | 88 | 105 | 17 | 105 | 105 | 17 |
| Naphthalene | ND | 2.8 | 2.8 | 3.8 | 3.8 | 74 | 74 | 0 | 74 | 74 | 0 |
| 2-Nitroaniline | ND | 3.9 | 4.7 | 7.5 | 7.5 | 52 | 63 | 18 | 63 | 63 | 18 |
| 3-Nitroaniline | ND | 2.9 | 3.4 | 7.5 | 7.5 | 39 | 45 | 14 | 45 | 45 | 14 |
| 4-Nitroaniline | ND | 3.2 | 3.7 | 3.8 | 3.8 | 86 | 99 | 15 | 99 | 99 | 15 |
| Nitrobenzene | ND | 3.3 | 3.3 | 3.8 | 3.8 | 89 | 89 | 0 | 89 | 89 | 0 |
| 2-Nitrophenol | ND | 5.5 | 5.5 | 7.5 | 7.5 | 73 | 73 | 0 | 73 | 73 | 0 |
| 4-Nitrophenol | ND | 7.7 | 8.8 | 7.5 | 7.5 | 102 | 117 | 14 | 117 | 117 | 14 |
| N-Nitrosodiphenylamine | ND | 3.5 | 3.9 | 3.8 | 3.8 | 92 | 103 | 11 | 103 | 103 | 11 |
| N-Nitroso-di- n-propylamine | ND | 3.6 | 4.0 | 3.8 | 3.8 | 95 | 105 | 10 | 105 | 105 | 10 |
| Pentachlorophenol | ND | 4.3 | 5.3 | 7.5 | 7.5 | 57 | 70 | 21 | 70 | 70 | 21 |
| Phenanthrene | ND | 3.0 | 3.4 | 3.8 | 3.8 | 80 | 89 | 11 | 89 | 89 | 11 |
| Phenol | ND | 5.6 | 5.7 | 7.5 | 7.5 | 74 | 76 | 3 | 76 | 76 | 3 |
| Pyrene | ND | 4.1 | 4.4 | 3.8 | 3.8 | 109 | 118 | 8 | 118 | 118 | 8 |
| 1,2,4-Trichlorobenzene | ND | 2.7 | 2.7 | 3.8 | 3.8 | 73 | 73 | 0 | 73 | 73 | 0 |
| 2,4,5-Trichlorophenol | ND | 4.7 | 5.0 | 7.5 | 7.5 | 62 | 67 | 7 | 67 | 67 | 7 |
| 2,4,6-Trichlorophenol | ND | 5.7 | 6.6 | 7.5 | 7.5 | 76 | 88 | 14 | 88 | 88 | 14 |

ND = Not detected.

NC = Not calculated, calculation not applicable.

All results and spike amounts are reported on a dry weight basis.

All calculations are performed before rounding to avoid round-off errors in calculated results.

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METALS

(Soil/Solid - Total)

Client Name: Gram, Inc.
Client ID: 03070001 (2.00,6.00,)
Lab ID: 077507-0002-SA
Matrix: SOIL
Authorized: 03 SEP 94

Sampled: 29 AUG 94
Prepared: See Below

Received: 03 SEP 94
Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|------------|--------|------------------|-----------------|-------------------|---------------|---------------|
| Aluminum | 8520 | mg/kg | 53.7 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Antimony | ND | mg/kg | 16.1 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Arsenic | 2.7 | mg/kg | 0.50 | 7060 | 12 SEP 94 | 14 SEP 94 |
| Barium | 194 | mg/kg | 10.7 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Beryllium | ND | mg/kg | 1.1 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Cadmium | ND | mg/kg | 0.54 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Calcium | 41400 | mg/kg | 107 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Chromium | 8.7 | mg/kg | 5.4 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Cobalt | ND | mg/kg | 5.4 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Copper | 6.2 | mg/kg | 5.4 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Iron | 8730 | mg/kg | 5.4 | 6010 | 12 SEP 94 | 12 SEP 94 |
| Lead | 6.3 | mg/kg | 1.0 | 7421 | 13 SEP 94 | 20 SEP 94 |
| Magnesium | 3440 | mg/kg | 107 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Manganese | 168 | mg/kg | 2.1 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Mercury | ND | mg/kg | 0.10 | 7471 | 12 SEP 94 | 13 SEP 94 |
| Molybdenum | ND | mg/kg | 10.7 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Nickel | ND | mg/kg | 16.1 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Potassium | 1610 | mg/kg | 537 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Selenium | 0.79 | mg/kg | 0.50 | 7740 | 12 SEP 94 | 13 SEP 94 |
| Silver | ND | mg/kg | 5.4 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Sodium | ND | mg/kg | 537 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Thallium | ND | mg/kg | 0.50 | 7841 | 13 SEP 94 | 20 SEP 94 |
| Vanadium | 14.6 | mg/kg | 10.7 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Zinc | 23.4 | mg/kg | 2.1 | 6010 | 13 SEP 94 | 20 SEP 94 |

Percent Moisture is 7%. All results and limits are reported on a dry weight basis.

Note R : Raised reporting limit(s) due to high analyte level(s).

ND = Not detected

NA = Not applicable

Reported By: Keith Varvell

Approved By: Mei Lai

The cover letter is an integral part of this report.
Rev 230787

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METALS

(Soil/Solid - Total)

Client Name: Gram, Inc.
Client ID: 03010001 (2.00, 6.00,)
Lab ID: 077507-0001-SA
Matrix: SOIL
Authorized: 03 SEP 94

Sampled: 29 AUG 94
Prepared: See Below

Received: 03 SEP 94
Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|------------|--------|------------------|-----------------|-------------------|---------------|---------------|
| Aluminum | 8030 | mg/kg | 52.1 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Antimony | ND | mg/kg | 15.6 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Arsenic | 2.5 | mg/kg | 0.52 | 7060 | 12 SEP 94 | 14 SEP 94 |
| Barium | 125 | mg/kg | 10.4 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Beryllium | ND | mg/kg | 1.0 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Cadmium | ND | mg/kg | 0.52 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Calcium | 24000 | mg/kg | 104 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Chromium | 8.4 | mg/kg | 5.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Cobalt | ND | mg/kg | 5.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Copper | 6.3 | mg/kg | 5.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Iron | 8330 | mg/kg | 5.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Lead | 6.2 | mg/kg | 0.52 | 7421 | 12 SEP 94 | 12 SEP 94 |
| Magnesium | 2910 | mg/kg | 104 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Manganese | 154 | mg/kg | 2.1 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Mercury | ND | mg/kg | 0.10 | 7471 | 12 SEP 94 | 13 SEP 94 |
| Molybdenum | ND | mg/kg | 10.4 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Nickel | ND | mg/kg | 15.6 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Potassium | 1630 | mg/kg | 521 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Selenium | ND | mg/kg | 0.52 | 7740 | 12 SEP 94 | 15 SEP 94 |
| Silver | ND | mg/kg | 5.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Sodium | ND | mg/kg | 521 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Thallium | ND | mg/kg | 0.50 | 7841 | 10 SEP 94 | 20 SEP 94 |
| Vanadium | 15.2 | mg/kg | 10.4 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Zinc | 21.3 | mg/kg | 2.1 | 6010 | 13 SEP 94 | 20 SEP 94 |

Percent Moisture is 4%. All results and limits are reported on a dry weight basis.

Note q : Post-digestion spike recovery fell between 40% and 85%
due to matrix interference.

ND = Not detected
NA = Not applicable

Reported By: Keith Varvell

Approved By: Mei Lai

The cover letter is an integral part of this report.
Rev 230787

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METALS

(Soil/Solid - Total)

Client Name: Gram, Inc.
Client ID: 02310001 (3.00, 6.00,)
Lab ID: 077507-0005-SA
Matrix: SOIL
Authorized: 03 SEP 94

Sampled: 30 AUG 94
Prepared: See Below

Received: 03 SEP 94
Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|------------|--------|------------------|-----------------|-------------------|---------------|---------------|
| Aluminum | 8970 | mg/kg | 52.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Antimony | ND | mg/kg | 15.7 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Arsenic | 2.5 | mg/kg | 0.50 | 7060 | 12 SEP 94 | 14 SEP 94 |
| Barium | 163 | mg/kg | 10.4 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Beryllium | ND | mg/kg | 1.0 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Cadmium | ND | mg/kg | 0.52 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Calcium | 48000 | mg/kg | 104 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Chromium | 9.2 | mg/kg | 5.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Cobalt | ND | mg/kg | 5.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Copper | 7.4 | mg/kg | 5.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Iron | 9150 | mg/kg | 5.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Lead | 6.8 | mg/kg | 1.0 | 7421 | 12 SEP 94 | 12 SEP 94 R |
| Magnesium | 3860 | mg/kg | 104 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Manganese | 195 | mg/kg | 2.1 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Mercury | ND | mg/kg | 0.10 | 7471 | 12 SEP 94 | 13 SEP 94 |
| Molybdenum | ND | mg/kg | 10.4 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Nickel | ND | mg/kg | 15.7 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Potassium | 2600 | mg/kg | 522 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Selenium | ND | mg/kg | 0.50 | 7740 | 12 SEP 94 | 16 SEP 94 |
| Silver | ND | mg/kg | 5.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Sodium | ND | mg/kg | 522 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Thallium | ND | mg/kg | 0.50 | 7841 | 10 SEP 94 | 20 SEP 94 |
| Vanadium | 15.6 | mg/kg | 10.4 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Zinc | 26.2 | mg/kg | 2.1 | 6010 | 13 SEP 94 | 20 SEP 94 |

Percent Moisture is 4%. All results and limits are reported on a dry weight basis.

Note R : Raised reporting limit(s) due to high analyte level(s).

ND = Not detected
NA = Not applicable

Reported By: Keith Varvell

Approved By: Mei Lai

The cover letter is an integral part of this report.
Rev 230787

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METALS

(Soil/Solid - Total)

Client Name: Gram, Inc.
Client ID: 02310002 (3.00,6.00,)
Lab ID: 077507-0006-SA
Matrix: SOIL
Authorized: 03 SEP 94

Sampled: 30 AUG 94
Prepared: See Below

Received: 03 SEP 94
Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|------------|--------|------------------|-----------------|-------------------|---------------|---------------|
| Aluminum | 8280 | mg/kg | 52.4 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Antimony | ND | mg/kg | 15.7 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Arsenic | 2.5 | mg/kg | 0.50 | 7060 | 12 SEP 94 | 14 SEP 94 |
| Barium | 142 | mg/kg | 10.5 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Beryllium | ND | mg/kg | 1.0 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Cadmium | ND | mg/kg | 0.52 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Calcium | 42100 | mg/kg | 105 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Chromium | 8.3 | mg/kg | 5.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Cobalt | ND | mg/kg | 5.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Copper | 7.2 | mg/kg | 5.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Iron | 8620 | mg/kg | 5.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Lead | 6.9 | mg/kg | 1.0 | 7421 | 12 SEP 94 | 12 SEP 94 |
| Magnesium | 3640 | mg/kg | 105 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Manganese | 192 | mg/kg | 2.1 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Mercury | ND | mg/kg | 0.10 | 7471 | 12 SEP 94 | 13 SEP 94 |
| Molybdenum | ND | mg/kg | 10.5 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Nickel | ND | mg/kg | 15.7 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Potassium | 2390 | mg/kg | 524 | 6010 | 12 SEP 94 | 13 SEP 94 |
| Selenium | 0.69 | mg/kg | 0.50 | 7740 | 13 SEP 94 | 20 SEP 94 |
| Silver | ND | mg/kg | 5.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Sodium | ND | mg/kg | 524 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Thallium | ND | mg/kg | 0.50 | 7841 | 10 SEP 94 | 20 SEP 94 |
| Vanadium | 15.2 | mg/kg | 10.5 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Zinc | 26.1 | mg/kg | 2.1 | 6010 | 13 SEP 94 | 20 SEP 94 |

Percent Moisture is 5%. All results and limits are reported on a dry weight basis.

Note R : Raised reporting limit(s) due to high analyte level(s).

ND = Not detected
NA = Not applicable

Reported By: Keith Varvell

Approved By: Mei Lai

The cover letter is an integral part of this report.
Rev 230787

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METALS

(Soil/Solid - Total)

Client Name: Gram, Inc.
Client ID: 02380001 (2.00,4.00,)
Lab ID: 077507-0007-SA
Matrix: SOIL
Authorized: 03 SEP 94

Sampled: 31 AUG 94
Prepared: See Below

Received: 03 SEP 94
Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|------------|--------|------------------|-----------------|-------------------|---------------|---------------|
| Aluminum | 9970 | mg/kg | 52.4 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Antimony | ND | mg/kg | 15.7 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Arsenic | 3.0 | mg/kg | 0.50 | 7060 | 12 SEP 94 | 14 SEP 94 |
| Barium | 152 | mg/kg | 10.5 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Beryllium | ND | mg/kg | 1.0 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Cadmium | ND | mg/kg | 0.52 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Calcium | 47100 | mg/kg | 105 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Chromium | 9.9 | mg/kg | 5.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Cobalt | ND | mg/kg | 5.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Copper | 8.6 | mg/kg | 5.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Iron | 9720 | mg/kg | 5.2 | 6010 | 12 SEP 94 | 12 SEP 94 |
| Lead | 8.4 | mg/kg | 1.0 | 7421 | 13 SEP 94 | 20 SEP 94 |
| Magnesium | 4090 | mg/kg | 105 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Manganese | 220 | mg/kg | 2.1 | 6010 | 12 SEP 94 | 13 SEP 94 |
| Mercury | ND | mg/kg | 0.10 | 7471 | 13 SEP 94 | 20 SEP 94 |
| Molybdenum | ND | mg/kg | 10.5 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Nickel | ND | mg/kg | 15.7 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Potassium | 2910 | mg/kg | 524 | 6010 | 12 SEP 94 | 13 SEP 94 |
| Selenium | 1.2 | mg/kg | 0.50 | 7740 | 13 SEP 94 | 20 SEP 94 |
| Silver | ND | mg/kg | 5.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Sodium | ND | mg/kg | 524 | 6010 | 10 SEP 94 | 20 SEP 94 |
| Thallium | ND | mg/kg | 0.50 | 7841 | 13 SEP 94 | 20 SEP 94 |
| Vanadium | 15.7 | mg/kg | 10.5 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Zinc | 29.2 | mg/kg | 2.1 | 6010 | 13 SEP 94 | 20 SEP 94 |

Percent Moisture is 5%. All results and limits are reported on a dry weight basis.

Note R : Raised reporting limit(s) due to high analyte level(s).

ND = Not detected

NA = Not applicable

Reported By: Keith Varvell

Approved By: Mei Lai

The cover letter is an integral part of this report.
Rev 230787

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METALS

Enseco
Corning Environmental Service

(Soil/Solid - Total)

Client Name: Gram, Inc.
 Client ID: 02880001 (3.00,6.00,)
 Lab ID: 077507-0008-SA
 Matrix: SOIL
 Authorized: 03 SEP 94

Sampled: 31 AUG 94
 Prepared: See Below

Received: 03 SEP 94
 Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|------------|--------|------------------|-----------------|-------------------|---------------|---------------|
| Aluminum | 5800 | mg/kg | 59.0 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Antimony | ND | mg/kg | 17.7 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Arsenic | 3.2 | mg/kg | 0.59 | 7060 | 12 SEP 94 | 14 SEP 94 |
| Barium | 187 | mg/kg | 11.8 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Beryllium | ND | mg/kg | 1.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Cadmium | ND | mg/kg | 0.59 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Calcium | 137000 | mg/kg | 236 | 6010 | 13 SEP 94 | 20 SEP 94 R |
| Chromium | 6.6 | mg/kg | 5.9 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Cobalt | ND | mg/kg | 5.9 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Copper | ND | mg/kg | 5.9 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Iron | 5280 | mg/kg | 5.9 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Lead | 3.8 | mg/kg | 0.59 | 7421 | 12 SEP 94 | 12 SEP 94 |
| Magnesium | 4300 | mg/kg | 118 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Manganese | 153 | mg/kg | 2.4 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Mercury | ND | mg/kg | 0.12 | 7471 | 12 SEP 94 | 13 SEP 94 |
| Molybdenum | ND | mg/kg | 11.8 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Nickel | ND | mg/kg | 17.7 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Potassium | 1240 | mg/kg | 590 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Selenium | ND | mg/kg | 0.59 | 7740 | 12 SEP 94 | 13 SEP 94 |
| Silver | ND | mg/kg | 5.9 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Sodium | ND | mg/kg | 590 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Thallium | ND | mg/kg | 0.50 | 7841 | 10 SEP 94 | 20 SEP 94 |
| Vanadium | 14.4 | mg/kg | 11.8 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Zinc | 12.4 | mg/kg | 2.4 | 6010 | 13 SEP 94 | 20 SEP 94 |

Percent Moisture is 15%. All results and limits are reported on a dry weight basis.

Note R : Raised reporting limit(s) due to high analyte level(s).

ND = Not detected

NA = Not applicable

Reported By: Keith Varvell

Approved By: Mei Lai

The cover letter is an integral part of this report.
 Rev 230787

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(Soil/Solid - Total)

Client Name: Gram, Inc.
 Client ID: 02920001
 Lab ID: 077507-0009-SA
 Matrix: SOIL
 Authorized: 03 SEP 94

(3.00,6.00,)

Sampled: 31 AUG 94
 Prepared: See Below

Received: 03 SEP 94
 Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|------------|--------|------------------|-----------------|-------------------|---------------|---------------|
| Aluminum | 5840 | mg/kg | 56.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Antimony | ND | mg/kg | 16.9 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Arsenic | 2.2 | mg/kg | 0.50 | 7060 | 12 SEP 94 | 14 SEP 94 |
| Barium | 182 | mg/kg | 11.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Beryllium | ND | mg/kg | 1.1 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Cadmium | ND | mg/kg | 0.56 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Calcium | 87400 | mg/kg | 112 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Chromium | 6.8 | mg/kg | 5.6 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Cobalt | ND | mg/kg | 5.6 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Copper | ND | mg/kg | 5.6 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Iron | 5730 | mg/kg | 5.6 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Lead | 3.3 | mg/kg | 0.50 | 7421 | 12 SEP 94 | 12 SEP 94 |
| Magnesium | 3740 | mg/kg | 112 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Manganese | 94.8 | mg/kg | 2.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Mercury | ND | mg/kg | 0.10 | 7471 | 12 SEP 94 | 13 SEP 94 |
| Molybdenum | ND | mg/kg | 11.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Nickel | ND | mg/kg | 16.9 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Potassium | 1210 | mg/kg | 562 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Selenium | 0.61 | mg/kg | 0.50 | 7740 | 12 SEP 94 | 13 SEP 94 |
| Silver | ND | mg/kg | 5.6 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Sodium | ND | mg/kg | 562 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Thallium | ND | mg/kg | 0.50 | 7841 | 10 SEP 94 | 20 SEP 94 |
| Vanadium | 14.1 | mg/kg | 11.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Zinc | 13.5 | mg/kg | 2.2 | 6010 | 13 SEP 94 | 20 SEP 94 |

Percent Moisture is 11%. All results and limits are reported on a dry weight basis.

ND = Not detected

NA = Not applicable

Reported By: Keith Varvell

Approved By: Mei Lai

The cover letter is an integral part of this report.
 Rev 230787

I-181

METALS

Enseco
Corning Environmental Service

(Soil/Solid - Total)

Client Name: Gram, Inc.
Client ID: 02540001 (2.50,6.00,)
Lab ID: 077507-0010-SA
Matrix: SOIL
Authorized: 03 SEP 94

Sampled: 01 SEP 94
Prepared: See Below

Received: 03 SEP 94
Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date | |
|------------|--------|------------------|-----------------|-------------------|---------------|---------------|---|
| Aluminum | 4910 | mg/kg | 56.5 | 6010 | 13 SEP 94 | 20 SEP 94 | |
| Antimony | ND | mg/kg | 16.9 | 6010 | 13 SEP 94 | 20 SEP 94 | |
| Arsenic | 3.1 | mg/kg | 0.50 | 7060 | 12 SEP 94 | 14 SEP 94 | |
| Barium | 275 | mg/kg | 11.3 | 6010 | 13 SEP 94 | 20 SEP 94 | |
| Beryllium | ND | mg/kg | 1.1 | 6010 | 13 SEP 94 | 20 SEP 94 | |
| Cadmium | ND | mg/kg | 0.56 | 6010 | 13 SEP 94 | 20 SEP 94 | |
| Calcium | 142000 | mg/kg | 226 | 6010 | 13 SEP 94 | 20 SEP 94 | R |
| Chromium | 5.6 | mg/kg | 5.6 | 6010 | 13 SEP 94 | 20 SEP 94 | |
| Cobalt | ND | mg/kg | 5.6 | 6010 | 13 SEP 94 | 20 SEP 94 | |
| Copper | ND | mg/kg | 5.6 | 6010 | 13 SEP 94 | 20 SEP 94 | |
| Iron | 4420 | mg/kg | 5.6 | 6010 | 13 SEP 94 | 20 SEP 94 | |
| Lead | 3.4 | mg/kg | 0.50 | 7421 | 12 SEP 94 | 12 SEP 94 | |
| Magnesium | 3490 | mg/kg | 113 | 6010 | 13 SEP 94 | 20 SEP 94 | |
| Manganese | 105 | mg/kg | 2.3 | 6010 | 13 SEP 94 | 20 SEP 94 | |
| Mercury | ND | mg/kg | 0.10 | 7471 | 12 SEP 94 | 13 SEP 94 | |
| Molybdenum | ND | mg/kg | 11.3 | 6010 | 13 SEP 94 | 20 SEP 94 | |
| Nickel | ND | mg/kg | 16.9 | 6010 | 13 SEP 94 | 20 SEP 94 | |
| Potassium | 931 | mg/kg | 565 | 6010 | 13 SEP 94 | 20 SEP 94 | |
| Selenium | ND | mg/kg | 2.0 | 7740 | 10 SEP 94 | 16 SEP 94 | 1 |
| Silver | ND | mg/kg | 5.6 | 6010 | 13 SEP 94 | 20 SEP 94 | |
| Sodium | ND | mg/kg | 565 | 6010 | 13 SEP 94 | 20 SEP 94 | |
| Thallium | ND | mg/kg | 0.50 | 7841 | 10 SEP 94 | 20 SEP 94 | |
| Vanadium | 12.1 | mg/kg | 11.3 | 6010 | 13 SEP 94 | 20 SEP 94 | |
| Zinc | 10.9 | mg/kg | 2.3 | 6010 | 13 SEP 94 | 20 SEP 94 | |

Percent Moisture is 11%. All results and limits are reported on a dry weight basis.

Note R : Raised reporting limit(s) due to high analyte level(s).

Note 1 : Reporting limit raised as a dilution was performed because the initial post-digest spike recovery fell between 40% and 85% due to matrix interference.

ND = Not detected

NA = Not applicable

Reported By: Keith Varvell

Approved By: Mei Lai

The cover letter is an integral part of this report.
Rev 230787

II-182

METALS

(Soil/Solid - Total)

Client Name: Gram, Inc.
Client ID: 02550001 (2.50,6.00,)
Lab ID: 077507-0011-SA
Matrix: SOIL
Authorized: 03 SEP 94

Sampled: 01 SEP 94
Prepared: See Below

Received: 03 SEP 94
Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|------------|--------|------------------|-----------------|-------------------|---------------|---------------|
| Aluminum | 7270 | mg/kg | 55.4 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Antimony | ND | mg/kg | 16.6 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Arsenic | 2.2 | mg/kg | 0.50 | 7060 | 12 SEP 94 | 14 SEP 94 |
| Barium | 111 | mg/kg | 11.1 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Beryllium | ND | mg/kg | 1.1 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Cadmium | ND | mg/kg | 0.55 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Calcium | 39900 | mg/kg | 111 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Chromium | 7.7 | mg/kg | 5.5 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Cobalt | ND | mg/kg | 5.5 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Copper | 6.4 | mg/kg | 5.5 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Iron | 7300 | mg/kg | 5.5 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Lead | 5.5 | mg/kg | 0.50 | 7421 | 12 SEP 94 | 12 SEP 94 |
| Magnesium | 2980 | mg/kg | 111 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Manganese | 145 | mg/kg | 2.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Mercury | ND | mg/kg | 0.10 | 7471 | 12 SEP 94 | 13 SEP 94 |
| Molybdenum | ND | mg/kg | 11.1 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Nickel | ND | mg/kg | 16.6 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Potassium | 1940 | mg/kg | 554 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Selenium | ND | mg/kg | 0.50 | 7740 | 12 SEP 94 | 13 SEP 94 |
| Silver | ND | mg/kg | 5.5 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Sodium | ND | mg/kg | 554 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Thallium | ND | mg/kg | 0.50 | 7841 | 10 SEP 94 | 20 SEP 94 |
| Vanadium | 12.2 | mg/kg | 11.1 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Zinc | 20.1 | mg/kg | 2.2 | 6010 | 13 SEP 94 | 20 SEP 94 |

Percent Moisture is 10%. All results and limits are reported on a dry weight basis.

ND = Not detected

NA = Not applicable

Reported By: Keith Varvell

Approved By: Mei Lai

The cover letter is an integral part of this report.
Rev 230787

123

METALS

Enseco
Corning Environmental Services

(Soil/Solid - Total)

Client Name: Gram, Inc.
Client ID: 02580001 (2.50,6.00,)
Lab ID: 077507-0012-SA
Matrix: SOIL
Authorized: 03 SEP 94

Sampled: 01 SEP 94
Prepared: See Below

Received: 03 SEP 94
Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|------------|--------|------------------|-----------------|-------------------|---------------|---------------|
| Aluminum | 12500 | mg/kg | 56.0 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Antimony | ND | mg/kg | 16.8 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Arsenic | 2.2 | mg/kg | 1.0 | 7060 | 12 SEP 94 | 14 SEP 94 |
| Barium | 118 | mg/kg | 11.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Beryllium | ND | mg/kg | 1.1 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Cadmium | ND | mg/kg | 0.56 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Calcium | 24000 | mg/kg | 112 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Chromium | 7.9 | mg/kg | 5.6 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Cobalt | ND | mg/kg | 5.6 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Copper | 7.9 | mg/kg | 5.6 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Iron | 8640 | mg/kg | 5.6 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Lead | 6.7 | mg/kg | 0.50 | 7421 | 12 SEP 94 | 12 SEP 94 |
| Magnesium | 3050 | mg/kg | 112 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Manganese | 184 | mg/kg | 2.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Mercury | ND | mg/kg | 0.10 | 7471 | 12 SEP 94 | 13 SEP 94 |
| Molybdenum | ND | mg/kg | 11.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Nickel | ND | mg/kg | 16.8 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Potassium | 2290 | mg/kg | 560 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Selenium | 1.1 | mg/kg | 0.50 | 7740 | 12 SEP 94 | 13 SEP 94 |
| Silver | ND | mg/kg | 5.6 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Sodium | ND | mg/kg | 560 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Thallium | ND | mg/kg | 0.50 | 7841 | 10 SEP 94 | 20 SEP 94 |
| Vanadium | 13.3 | mg/kg | 11.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Zinc | 26.1 | mg/kg | 2.2 | 6010 | 13 SEP 94 | 20 SEP 94 |

Percent Moisture is 11%. All results and limits are reported on a dry weight basis.

Note 1 : Reporting limit raised as a dilution was performed because
the initial post-digest spike recovery fell between 40%
and 85% due to matrix interference.

ND = Not detected

NA = Not applicable

Reported By: Keith Varvell

Approved By: Mei Lai

The cover letter is an integral part of this report.
Rev 230787

2 - 184

METALS

(Soil/Solid - Total)

Client Name: Gram, Inc.
Client ID: 02470001 (1.50,3.00,)
Lab ID: 077507-0013-SA
Matrix: SOIL
Authorized: 03 SEP 94

Sampled: 02 SEP 94
Prepared: See Below

Received: 03 SEP 94
Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|------------|--------|------------------|-----------------|-------------------|---------------|---------------|
| Aluminum | 9800 | mg/kg | 56.4 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Antimony | ND | mg/kg | 16.9 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Arsenic | 2.6 | mg/kg | 2.3 | 7060 | 12 SEP 94 | 21 SEP 94 |
| Barium | 136 | mg/kg | 11.3 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Beryllium | ND | mg/kg | 1.1 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Cadmium | ND | mg/kg | 0.56 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Calcium | 27300 | mg/kg | 113 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Chromium | 9.8 | mg/kg | 5.6 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Cobalt | ND | mg/kg | 5.6 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Copper | 9.2 | mg/kg | 5.6 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Iron | 10300 | mg/kg | 5.6 | 6010 | 12 SEP 94 | 12 SEP 94 |
| Lead | 9.4 | mg/kg | 1.1 | 7421 | 12 SEP 94 | 20 SEP 94 |
| Magnesium | 4030 | mg/kg | 113 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Manganese | 231 | mg/kg | 2.3 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Mercury | ND | mg/kg | 0.11 | 7471 | 12 SEP 94 | 13 SEP 94 |
| Molybdenum | ND | mg/kg | 11.3 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Nickel | ND | mg/kg | 16.9 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Potassium | 2810 | mg/kg | 564 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Selenium | 2.0 | mg/kg | 0.56 | 7740 | 12 SEP 94 | 13 SEP 94 |
| Silver | ND | mg/kg | 5.6 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Sodium | ND | mg/kg | 564 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Thallium | ND | mg/kg | 0.50 | 7841 | 10 SEP 94 | 20 SEP 94 |
| Vanadium | 16.4 | mg/kg | 11.3 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Zinc | 31.1 | mg/kg | 2.3 | 6010 | 13 SEP 94 | 20 SEP 94 |

Percent Moisture is 11%. All results and limits are reported on a dry weight basis.

Note 1 : Reporting limit raised as a dilution was performed because
the initial post-digest spike recovery fell between 40%
and 85% due to matrix interference.

Note R : Raised reporting limit(s) due to high analyte level(s).

ND = Not detected
NA = Not applicable

Reported By: Keith Varvell

Approved By: Mei Lai

The cover letter is an integral part of this report.
Rev 230787

J-185

METALS

Enseco
Corning Environmental Service

(Soil/Solid - Total)

Client Name: Gram, Inc.
Client ID: 02460001 (2.50,6.00,)
Lab ID: 077507-0014-SA
Matrix: SOIL
Authorized: 03 SEP 94

Sampled: 02 SEP 94
Prepared: See Below

Received: 03 SEP 94
Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|------------|--------|------------------|-----------------|-------------------|---------------|---------------|
| Aluminum | 5490 | mg/kg | 55.0 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Antimony | ND | mg/kg | 16.5 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Arsenic | 2.8 | mg/kg | 0.55 | 7060 | 12 SEP 94 | 14 SEP 94 |
| Barium | 154 | mg/kg | 11.0 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Beryllium | ND | mg/kg | 1.1 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Cadmium | ND | mg/kg | 0.55 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Calcium | 90700 | mg/kg | 110 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Chromium | ND | mg/kg | 5.5 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Cobalt | ND | mg/kg | 5.5 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Copper | 5.7 | mg/kg | 5.5 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Iron | 5550 | mg/kg | 5.5 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Lead | 4.3 | mg/kg | 0.55 | 7421 | 12 SEP 94 | 12 SEP 94 |
| Magnesium | 3010 | mg/kg | 110 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Manganese | 96.6 | mg/kg | 2.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Mercury | ND | mg/kg | 0.11 | 7471 | 12 SEP 94 | 13 SEP 94 |
| Molybdenum | ND | mg/kg | 11.0 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Nickel | ND | mg/kg | 16.5 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Potassium | 1210 | mg/kg | 550 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Selenium | ND | mg/kg | 0.55 | 7740 | 12 SEP 94 | 13 SEP 94 |
| Silver | ND | mg/kg | 5.5 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Sodium | ND | mg/kg | 550 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Thallium | ND | mg/kg | 0.50 | 7841 | 10 SEP 94 | 20 SEP 94 |
| Vanadium | 12.2 | mg/kg | 11.0 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Zinc | 14.9 | mg/kg | 2.2 | 6010 | 13 SEP 94 | 20 SEP 94 |

Percent Moisture is 9%. All results and limits are reported on a dry weight basis.

ND = Not detected

NA = Not applicable

Reported By: Keith Varvell

Approved By: Mei Lai

The cover letter is an integral part of this report.
Rev 230787

F-126

METALS

(Soil/Solid - Total)

Client Name: Gram, Inc.
 Client ID: 02480001 (3.00,5.50,)
 Lab ID: 077507-0015-SA
 Matrix: SOIL
 Authorized: 03 SEP 94

Sampled: 02 SEP 94
 Prepared: See Below

Received: 03 SEP 94
 Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|------------|--------|------------------|-----------------|-------------------|---------------|---------------|
| Aluminum | 9100 | mg/kg | 53.8 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Antimony | ND | mg/kg | 16.1 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Arsenic | 2.8 | mg/kg | 1.1 | 7060 | 12 SEP 94 | 14 SEP 94 |
| Barium | 145 | mg/kg | 10.8 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Beryllium | ND | mg/kg | 1.1 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Cadmium | ND | mg/kg | 0.54 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Calcium | 35400 | mg/kg | 108 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Chromium | 8.8 | mg/kg | 5.4 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Cobalt | ND | mg/kg | 5.4 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Copper | 7.5 | mg/kg | 5.4 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Iron | 9230 | mg/kg | 5.4 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Lead | 7.3 | mg/kg | 1.1 | 7421 | 12 SEP 94 | 12 SEP 94 |
| Magnesium | 3790 | mg/kg | 108 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Manganese | 196 | mg/kg | 2.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Mercury | ND | mg/kg | 0.11 | 7471 | 12 SEP 94 | 13 SEP 94 |
| Molybdenum | ND | mg/kg | 10.8 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Nickel | ND | mg/kg | 16.1 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Potassium | 2590 | mg/kg | 538 | 6010 | 12 SEP 94 | 16 SEP 94 |
| Selenium | ND | mg/kg | 0.54 | 7740 | 13 SEP 94 | 20 SEP 94 |
| Silver | ND | mg/kg | 5.4 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Sodium | ND | mg/kg | 538 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Thallium | ND | mg/kg | 0.50 | 7841 | 12 SEP 94 | 20 SEP 94 |
| Vanadium | 15.1 | mg/kg | 10.8 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Zinc | 28.1 | mg/kg | 2.2 | 6010 | 13 SEP 94 | 20 SEP 94 |

Percent Moisture is 7%. All results and limits are reported on a dry weight basis.

Note 1 : Reporting limit raised as a dilution was performed because the initial post-digest spike recovery fell between 40% and 85% due to matrix interference.

Note R : Raised reporting limit(s) due to high analyte level(s).

ND = Not detected

NA = Not applicable

Reported By: Keith Varvell

Approved By: Mei Lai

The cover letter is an integral part of this report.
 Rev 230787

J-187

METALS

(Soil/Solid - Total)

Client Name: Gram, Inc.
Client ID: 02490001 (3.00,6.00,)
Lab ID: 077507-0017-SA
Matrix: SOIL
Authorized: 03 SEP 94

Sampled: 02 SEP 94
Prepared: See Below

Received: 03 SEP 94
Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|------------|--------|------------------|-----------------|-------------------|---------------|---------------|
| Aluminum | 5240 | mg/kg | 55.5 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Antimony | ND | mg/kg | 16.7 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Arsenic | 1.6 | mg/kg | 1.1 | 7060 | 12 SEP 94 | 14 SEP 94 |
| Barium | 104 | mg/kg | 11.1 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Beryllium | ND | mg/kg | 1.1 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Cadmium | ND | mg/kg | 0.56 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Calcium | 33000 | mg/kg | 111 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Chromium | 6.6 | mg/kg | 5.6 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Cobalt | ND | mg/kg | 5.6 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Copper | ND | mg/kg | 5.6 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Iron | 6070 | mg/kg | 5.6 | 6010 | 12 SEP 94 | 12 SEP 94 |
| Lead | 5.7 | mg/kg | 0.56 | 7421 | 13 SEP 94 | 20 SEP 94 |
| Magnesium | 2750 | mg/kg | 111 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Manganese | 132 | mg/kg | 2.2 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Mercury | ND | mg/kg | 0.11 | 7471 | 12 SEP 94 | 13 SEP 94 |
| Molybdenum | ND | mg/kg | 11.1 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Nickel | ND | mg/kg | 16.7 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Potassium | 1450 | mg/kg | 555 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Selenium | ND | mg/kg | 0.56 | 7740 | 12 SEP 94 | 13 SEP 94 |
| Silver | ND | mg/kg | 5.6 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Sodium | ND | mg/kg | 555 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Thallium | ND | mg/kg | 0.50 | 7841 | 10 SEP 94 | 20 SEP 94 |
| Vanadium | 13.9 | mg/kg | 11.1 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Zinc | 17.4 | mg/kg | 2.2 | 6010 | 13 SEP 94 | 20 SEP 94 |

Percent Moisture is 10%. All results and limits are reported on a dry weight basis.

Note 1 : Reporting limit raised as a dilution was performed because
the initial post-digest spike recovery fell between 40%
and 85% due to matrix interference.

ND = Not detected

NA = Not applicable

Reported By: Keith Varvell

Approved By: Mei Lai

The cover letter is an integral part of this report.
Rev 230787

J-188

METALS

(Soil/Solid - Total)

Client Name: Gram, Inc.
Client ID: 02500001 (1.50, 2.50,)
Lab ID: 077507-0016-SA
Matrix: SOIL
Authorized: 03 SEP 94

Sampled: 02 SEP 94
Prepared: See Below

Received: 03 SEP 94
Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|------------|--------|------------------|-----------------|-------------------|---------------|---------------|
| Aluminum | 8170 | mg/kg | 56.4 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Antimony | ND | mg/kg | 16.9 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Arsenic | 1.4 | mg/kg | 0.56 | 7060 | 12 SEP 94 | 14 SEP 94 |
| Barium | 111 | mg/kg | 11.3 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Beryllium | ND | mg/kg | 1.1 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Cadmium | ND | mg/kg | 0.56 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Calcium | 18100 | mg/kg | 113 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Chromium | 8.5 | mg/kg | 5.6 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Cobalt | ND | mg/kg | 5.6 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Copper | 8.3 | mg/kg | 5.6 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Iron | 8700 | mg/kg | 5.6 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Lead | 5.8 | mg/kg | 2.8 | 7421 | 12 SEP 94 | 12 SEP 94 |
| Magnesium | 3610 | mg/kg | 113 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Manganese | 215 | mg/kg | 2.3 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Mercury | ND | mg/kg | 0.11 | 7471 | 12 SEP 94 | 13 SEP 94 |
| Molybdenum | ND | mg/kg | 11.3 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Nickel | ND | mg/kg | 16.9 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Potassium | 2820 | mg/kg | 564 | 6010 | 12 SEP 94 | 13 SEP 94 |
| Selenium | ND | mg/kg | 0.56 | 7740 | 13 SEP 94 | 20 SEP 94 |
| Silver | ND | mg/kg | 5.6 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Sodium | ND | mg/kg | 564 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Thallium | ND | mg/kg | 0.50 | 7841 | 10 SEP 94 | 20 SEP 94 |
| Vanadium | 13.5 | mg/kg | 11.3 | 6010 | 13 SEP 94 | 20 SEP 94 |
| Zinc | 38.3 | mg/kg | 2.3 | 6010 | 13 SEP 94 | 20 SEP 94 |

Percent Moisture is 11%. All results and limits are reported on a dry weight basis.

Note 1 : Reporting limit raised as a dilution was performed because the initial post-digest spike recovery fell between 40% and 85% due to matrix interference.

ND = Not detected

NA = Not applicable

Reported By: Keith Varvell

Approved By: Mei Lai

The cover letter is an integral part of this report.
Rev 230787

QC LOT ASSIGNMENT REPORT
Metals Analysis and Preparation

| Laboratory Sample Number | QC Matrix | QC Category | QC Lot Number (DCS) | QC Run Number (SCS/BLANK) |
|--------------------------|-----------|-------------|---------------------|---------------------------|
| 077507-0001-SA | SOIL | 7471-IRP-S | 12 SEP 94-E | 12 SEP 94-E |
| 077507-0001-SA | SOIL | 7421-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0001-SA | SOIL | 7060-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0001-SA | SOIL | 7740-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0001-SA | SOIL | ICP-IRP-S | 13 SEP 94-A | 13 SEP 94-A |
| 077507-0001-SA | SOIL | 7841-IRP-S | 10 SEP 94-B | 10 SEP 94-B |
| 077507-0002-SA | SOIL | 7471-IRP-S | 12 SEP 94-E | 12 SEP 94-E |
| 077507-0002-SA | SOIL | 7421-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0002-SA | SOIL | 7060-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0002-SA | SOIL | 7740-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0002-SA | SOIL | ICP-IRP-S | 13 SEP 94-A | 13 SEP 94-A |
| 077507-0002-SA | SOIL | 7841-IRP-S | 10 SEP 94-B | 10 SEP 94-B |
| 077507-0005-SA | SOIL | 7471-IRP-S | 12 SEP 94-E | 12 SEP 94-E |
| 077507-0005-SA | SOIL | 7421-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0005-SA | SOIL | 7060-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0005-SA | SOIL | 7740-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0005-SA | SOIL | ICP-IRP-S | 13 SEP 94-A | 13 SEP 94-A |
| 077507-0005-SA | SOIL | 7841-IRP-S | 10 SEP 94-B | 10 SEP 94-B |
| 077507-0006-SA | SOIL | 7471-IRP-S | 12 SEP 94-E | 12 SEP 94-E |
| 077507-0006-SA | SOIL | 7421-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0006-SA | SOIL | 7060-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0006-SA | SOIL | 7740-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0006-SA | SOIL | ICP-IRP-S | 13 SEP 94-A | 13 SEP 94-A |
| 077507-0006-SA | SOIL | 7841-IRP-S | 10 SEP 94-B | 10 SEP 94-B |
| 077507-0007-SA | SOIL | 7471-IRP-S | 12 SEP 94-E | 12 SEP 94-E |
| 077507-0007-SA | SOIL | 7421-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0007-SA | SOIL | 7060-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0007-SA | SOIL | 7740-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0007-SA | SOIL | ICP-IRP-S | 13 SEP 94-A | 13 SEP 94-A |
| 077507-0007-SA | SOIL | 7841-IRP-S | 10 SEP 94-B | 10 SEP 94-B |
| 077507-0008-SA | SOIL | 7471-IRP-S | 12 SEP 94-E | 12 SEP 94-E |
| 077507-0008-SA | SOIL | 7421-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0008-SA | SOIL | 7060-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0008-SA | SOIL | 7740-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0008-SA | SOIL | ICP-IRP-S | 13 SEP 94-A | 13 SEP 94-A |
| 077507-0008-SA | SOIL | 7841-IRP-S | 10 SEP 94-B | 10 SEP 94-B |
| 077507-0009-SA | SOIL | 7471-IRP-S | 12 SEP 94-E | 12 SEP 94-E |
| 077507-0009-SA | SOIL | 7421-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0009-SA | SOIL | 7060-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0009-SA | SOIL | 7740-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0009-SA | SOIL | ICP-IRP-S | 13 SEP 94-A | 13 SEP 94-A |
| 077507-0009-SA | SOIL | 7841-IRP-S | 10 SEP 94-B | 10 SEP 94-B |
| 077507-0010-SA | SOIL | 7471-IRP-S | 12 SEP 94-E | 12 SEP 94-E |
| 077507-0010-SA | SOIL | 7421-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0010-SA | SOIL | 7060-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0010-SA | SOIL | 7740-IRP-S | 10 SEP 94-BX | 10 SEP 94-BX |
| 077507-0010-SA | SOIL | ICP-IRP-S | 13 SEP 94-A | 13 SEP 94-A |

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QC LOT ASSIGNMENT REPORT
Wet Chemistry Analysis and Preparation

| Laboratory Sample Number | QC Matrix | QC Category | QC Lot Number (DCS) | QC Run Number (SCS/BLANK) |
|-----------------------------|-----------|-------------|------------------------|------------------------------|
| 077507-0001-SA | SOIL | NO3&NO2-S | 16 SEP 94-B | 16 SEP 94-B |
| 077507-0001-SA | SOIL | CN-IRP-S | 12 SEP 94-A | 12 SEP 94-A |
| 077507-0002-SA | SOIL | NO3&NO2-S | 16 SEP 94-B | 16 SEP 94-B |
| 077507-0002-SA | SOIL | CN-IRP-S | 12 SEP 94-A | 12 SEP 94-A |
| 077507-0005-SA | SOIL | NO3&NO2-S | 16 SEP 94-B | 16 SEP 94-B |
| 077507-0005-SA | SOIL | CN-IRP-S | 12 SEP 94-A | 12 SEP 94-A |
| 077507-0006-SA | SOIL | NO3&NO2-S | 16 SEP 94-B | 16 SEP 94-B |
| 077507-0006-SA | SOIL | CN-IRP-S | 12 SEP 94-A | 12 SEP 94-A |
| 077507-0007-SA | SOIL | NO3&NO2-S | 16 SEP 94-B | 16 SEP 94-B |
| 077507-0007-SA | SOIL | CN-IRP-S | 12 SEP 94-A | 12 SEP 94-A |
| 077507-0008-SA | SOIL | NO3&NO2-S | 16 SEP 94-B | 16 SEP 94-B |
| 077507-0008-SA | SOIL | CN-IRP-S | 12 SEP 94-A | 12 SEP 94-A |
| 077507-0009-SA | SOIL | NO3&NO2-S | 16 SEP 94-B | 16 SEP 94-B |
| 077507-0009-SA | SOIL | CN-IRP-S | 12 SEP 94-A | 12 SEP 94-A |
| 077507-0010-SA | SOIL | NO3&NO2-S | 16 SEP 94-B | 16 SEP 94-B |
| 077507-0010-SA | SOIL | CN-IRP-S | 12 SEP 94-A | 12 SEP 94-A |
| 077507-0010-MS | SOIL | NO3&NO2-S | 16 SEP 94-B | 16 SEP 94-B |
| 077507-0010-MS | SOIL | CN-IRP-S | 12 SEP 94-A | 12 SEP 94-A |
| 077507-0010-SD | SOIL | NO3&NO2-S | 16 SEP 94-B | 16 SEP 94-B |
| 077507-0010-SD | SOIL | CN-IRP-S | 12 SEP 94-A | 12 SEP 94-A |
| 077507-0011-SA | SOIL | NO3&NO2-S | 16 SEP 94-B | 16 SEP 94-B |
| 077507-0011-SA | SOIL | CN-IRP-S | 12 SEP 94-A | 12 SEP 94-A |
| 077507-0012-SA | SOIL | NO3&NO2-S | 16 SEP 94-B | 16 SEP 94-B |
| 077507-0012-SA | SOIL | CN-IRP-S | 12 SEP 94-A | 12 SEP 94-A |

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METHOD BLANK REPORT
Wet Chemistry Analysis and Preparation

| Analyte | Result | Units | Reporting Limit |
|--|--------|-------|-----------------|
| Test: NO ₃ &NO ₂ -S Matrix: SOIL QC Lot: 16 SEP 94-B QC Run: 16 SEP 94-B | | | |
| Nitrate + Nitrite (as N) | ND | mg/kg | 0.25 |
| Test: CN-9012-IRP-KAFB-S Matrix: SOIL QC Lot: 12 SEP 94-A QC Run: 12 SEP 94-A | | | |
| Cyanide, Total | ND | mg/kg | 0.50 |
| Test: NO ₃ &NO ₂ -S Matrix: SOIL QC Lot: 16 SEP 94-B QC Run: 16 SEP 94-B | | | |
| Nitrate + Nitrite (as N) | ND | mg/kg | 0.25 |
| Test: CN-9012-IRP-KAFB-S Matrix: SOIL QC Lot: 12 SEP 94-A QC Run: 12 SEP 94-A | | | |
| Cyanide, Total | ND | mg/kg | 0.50 |
| Test: NO ₃ &NO ₂ -S Matrix: SOIL QC Lot: 16 SEP 94-B QC Run: 16 SEP 94-B | | | |
| Nitrate + Nitrite (as N) | ND | mg/kg | 0.25 |
| Test: CN-9012-IRP-KAFB-S Matrix: SOIL QC Lot: 12 SEP 94-A QC Run: 12 SEP 94-A | | | |
| Cyanide, Total | ND | mg/kg | 0.50 |

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LABORATORY CONTROL SAMPLE REPORT
Wet Chemistry Analysis and Preparation

| Analyte | Concentration | | Accuracy(%) | |
|---------|---------------|----------|-------------|--------|
| | Spiked | Measured | LCS | Limits |

Category: NO₃&NO₂-S Nitrate plus nitrite for soil/solid/waste matrices.

Matrix: SOIL

QC Lot: 16 SEP 94-B QC Run: 16 SEP 94-B

Concentration Units: mg/kg

| | | | | |
|--------------------------|------|------|----|--------|
| Nitrate + Nitrite (as N) | 12.5 | 12.1 | 97 | 75-125 |
|--------------------------|------|------|----|--------|

| Analyte | Concentration | | Accuracy(%) | |
|---------|---------------|----------|-------------|--------|
| | Spiked | Measured | LCS | Limits |

Category: CN-IRP-S Cyanide

Matrix: SOIL

QC Lot: 12 SEP 94-A QC Run: 12 SEP 94-A

Concentration Units: mg/kg

| | | | | |
|----------------|------|------|-----|--------|
| Cyanide, Total | 5.00 | 5.55 | 111 | 77-115 |
|----------------|------|------|-----|--------|

ND = Not Detected

Calculations are performed before rounding to avoid round-off errors in calculated results.

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MATRIX SPECIFIC QC
ASSIGNMENT REPORT
Wet Chemistry Analysis and Preparation

| QC SAMPLE TYPE | TEST | LABORATORY SAMPLE NUMBER | QC LOT |
|------------------------|--------------------|-----------------------------|-------------|
| MATRIX SPIKE DUPLICATE | NO3&NO2-S | 077507-0010-SD | 16 SEP 94-B |
| MATRIX SPIKE | NO3&NO2-S | 077507-0010-MS | 16 SEP 94-B |
| MATRIX SPIKE DUPLICATE | CN-9012-IRP-KAFB-S | 077507-0010-SD | 12 SEP 94-A |
| MATRIX SPIKE | CN-9012-IRP-KAFB-S | 077507-0010-MS | 12 SEP 94-A |

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QC LOT ASSIGNMENT REPORT
Metals Analysis and Preparation (cont.)

| Laboratory Sample Number | QC Matrix | QC Category | QC Lot Number (DCS) | QC Run Number (SCS/BLANK) |
|--------------------------|-----------|-------------|---------------------|---------------------------|
| 077507-0010-SA | SOIL | 7841-IRP-S | 10 SEP 94-B | 10 SEP 94-B |
| 077507-0010-MS | SOIL | 7471-IRP-S | 12 SEP 94-E | 12 SEP 94-E |
| 077507-0010-MS | SOIL | 7421-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0010-MS | SOIL | 7060-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0010-MS | SOIL | 7740-IRP-S | 10 SEP 94-BX | 10 SEP 94-BX |
| 077507-0010-MS | SOIL | ICP-IRP-S | 13 SEP 94-A | 13 SEP 94-A |
| 077507-0010-MS | SOIL | 7841-IRP-S | 10 SEP 94-B | 10 SEP 94-B |
| 077507-0010-MS | SOIL | 7471-IRP-S | 12 SEP 94-E | 12 SEP 94-E |
| 077507-0010-SD | SOIL | 7421-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0010-SD | SOIL | 7060-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0010-SD | SOIL | 7740-IRP-S | 10 SEP 94-BX | 10 SEP 94-BX |
| 077507-0010-SD | SOIL | ICP-IRP-S | 13 SEP 94-A | 13 SEP 94-A |
| 077507-0010-SD | SOIL | 7841-IRP-S | 10 SEP 94-B | 10 SEP 94-B |
| 077507-0010-SD | SOIL | 7471-IRP-S | 12 SEP 94-E | 12 SEP 94-E |
| 077507-0011-SA | SOIL | 7421-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0011-SA | SOIL | 7060-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0011-SA | SOIL | 7740-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0011-SA | SOIL | ICP-IRP-S | 13 SEP 94-A | 13 SEP 94-A |
| 077507-0011-SA | SOIL | 7841-IRP-S | 10 SEP 94-B | 10 SEP 94-B |
| 077507-0011-SA | SOIL | 7471-IRP-S | 12 SEP 94-E | 12 SEP 94-E |
| 077507-0011-SA | SOIL | 7841-IRP-S | 10 SEP 94-B | 10 SEP 94-B |
| 077507-0011-SA | SOIL | 7471-IRP-S | 12 SEP 94-E | 12 SEP 94-E |
| 077507-0012-SA | SOIL | 7421-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0012-SA | SOIL | 7060-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0012-SA | SOIL | 7740-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0012-SA | SOIL | ICP-IRP-S | 13 SEP 94-A | 13 SEP 94-A |
| 077507-0012-SA | SOIL | 7841-IRP-S | 10 SEP 94-B | 10 SEP 94-B |
| 077507-0012-SA | SOIL | 7471-IRP-S | 12 SEP 94-E | 12 SEP 94-E |
| 077507-0013-SA | SOIL | 7421-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0013-SA | SOIL | 7060-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0013-SA | SOIL | 7740-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0013-SA | SOIL | ICP-IRP-S | 13 SEP 94-A | 13 SEP 94-A |
| 077507-0013-SA | SOIL | 7841-IRP-S | 10 SEP 94-B | 10 SEP 94-B |
| 077507-0013-SA | SOIL | 7471-IRP-S | 12 SEP 94-E | 12 SEP 94-E |
| 077507-0014-SA | SOIL | 7421-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0014-SA | SOIL | 7060-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0014-SA | SOIL | 7740-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0014-SA | SOIL | ICP-IRP-S | 13 SEP 94-A | 13 SEP 94-A |
| 077507-0014-SA | SOIL | 7841-IRP-S | 10 SEP 94-B | 10 SEP 94-B |
| 077507-0014-SA | SOIL | 7471-IRP-S | 12 SEP 94-E | 12 SEP 94-E |
| 077507-0015-SA | SOIL | 7421-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0015-SA | SOIL | 7060-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0015-SA | SOIL | 7740-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0015-SA | SOIL | ICP-IRP-S | 13 SEP 94-A | 13 SEP 94-A |
| 077507-0015-SA | SOIL | 7841-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0016-SA | SOIL | 7471-IRP-S | 12 SEP 94-E | 12 SEP 94-E |
| 077507-0016-SA | SOIL | 7421-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0016-SA | SOIL | 7060-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0016-SA | SOIL | 7740-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |

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QC LOT ASSIGNMENT REPORT
Metals Analysis and Preparation (cont.)

| Laboratory Sample Number | QC Matrix | QC Category | QC Lot Number (DCS) | QC Run Number (SCS/BLANK) |
|-----------------------------|-----------|-------------|------------------------|------------------------------|
| 077507-0016-SA | SOIL | ICP-IRP-S | 13 SEP 94-A | 13 SEP 94-A |
| 077507-0016-SA | SOIL | 7841-IRP-S | 10 SEP 94-B | 10 SEP 94-B |
| 077507-0017-SA | SOIL | 7471-IRP-S | 12 SEP 94-E | 12 SEP 94-E |
| 077507-0017-SA | SOIL | 7421-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0017-SA | SOIL | 7060-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0017-SA | SOIL | 7740-IRP-S | 12 SEP 94-DX | 12 SEP 94-DX |
| 077507-0017-SA | SOIL | ICP-IRP-S | 13 SEP 94-A | 13 SEP 94-A |
| 077507-0017-SA | SOIL | 7841-IRP-S | 10 SEP 94-B | 10 SEP 94-B |

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METHOD BLANK REPORT
Metals Analysis and Preparation

| Analyte | Result | Units | Reporting Limit |
|------------|--------|-------|-----------------|
| Mercury | ND | mg/kg | 0.10 |
| Lead | ND | mg/kg | 0.50 |
| Arsenic | ND | mg/kg | 0.50 |
| Selenium | ND | mg/kg | 0.50 |
| Aluminum | ND | mg/kg | 50.0 |
| Antimony | ND | mg/kg | 15.0 |
| Barium | ND | mg/kg | 10.0 |
| Beryllium | ND | mg/kg | 1.0 |
| Cadmium | ND | mg/kg | 0.50 |
| Calcium | ND | mg/kg | 100 |
| Chromium | ND | mg/kg | 5.0 |
| Cobalt | ND | mg/kg | 5.0 |
| Copper | ND | mg/kg | 5.0 |
| Iron | ND | mg/kg | 100 |
| Magnesium | ND | mg/kg | 5.0 |
| Manganese | ND | mg/kg | 2.0 |
| Molybdenum | ND | mg/kg | 10.0 |

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METHOD BLANK REPORT
Metals Analysis and Preparation (cont.)

| Analyte | Result | Units | Reporting Limit |
|----------------------|----------------------|-------|-----------------|
| Test: ICP-IRPMS-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 13 SEP 94-A | QC Run: 13 SEP 94-A | | |
| Nickel | ND | mg/kg | 15.0 |
| Potassium | ND | mg/kg | 500 |
| Silver | ND | mg/kg | 5.0 |
| Sodium | ND | mg/kg | 500 |
| Vanadium | ND | mg/kg | 10.0 |
| Zinc | ND | mg/kg | 2.0 |
| Test: TL-FAA-IRP-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 10 SEP 94-B | QC Run: 10 SEP 94-B | | |
| Thallium | ND | mg/kg | 0.50 |
| Test: HG-CVAA-IRP-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 12 SEP 94-E | QC Run: 12 SEP 94-E | | |
| Mercury | ND | mg/kg | 0.10 |
| Test: PB-FAA-IRP-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 12 SEP 94-DX | QC Run: 12 SEP 94-DX | | |
| Lead | ND | mg/kg | 0.50 |
| Test: AS-FAA-IRP-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 12 SEP 94-DX | QC Run: 12 SEP 94-DX | | |
| Arsenic | ND | mg/kg | 0.50 |

METHOD BLANK REPORT
Metals Analysis and Preparation (cont.)

| Analyte | Result | Units | Reporting Limit |
|----------------------|----------------------|-------|-----------------|
| Test: SE-FAA-IRP-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 12 SEP 94-DX | QC Run: 12 SEP 94-DX | | |
| Selenium | ND | mg/kg | 0.50 |
| Test: ICP-IRPMS-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 13 SEP 94-A | QC Run: 13 SEP 94-A | | |
| Aluminum | ND | mg/kg | 50.0 |
| Antimony | ND | mg/kg | 15.0 |
| Barium | ND | mg/kg | 10.0 |
| Beryllium | ND | mg/kg | 1.0 |
| Cadmium | ND | mg/kg | 0.50 |
| Calcium | ND | mg/kg | 100 |
| Chromium | ND | mg/kg | 5.0 |
| Cobalt | ND | mg/kg | 5.0 |
| Copper | ND | mg/kg | 5.0 |
| Iron | ND | mg/kg | 5.0 |
| Magnesium | ND | mg/kg | 100 |
| Manganese | ND | mg/kg | 2.0 |
| Molybdenum | ND | mg/kg | 10.0 |
| Nickel | ND | mg/kg | 15.0 |
| Potassium | ND | mg/kg | 500 |
| Silver | ND | mg/kg | 5.0 |
| Sodium | ND | mg/kg | 500 |
| Vanadium | ND | mg/kg | 10.0 |
| Zinc | ND | mg/kg | 2.0 |
| Test: TL-FAA-IRP-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 10 SEP 94-B | QC Run: 10 SEP 94-B | | |
| Thallium | ND | mg/kg | 0.50 |

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METHOD BLANK REPORT
Metals Analysis and Preparation (cont.)

| Analyte | Result | Units | Reporting Limit |
|-----------|--------|-------|-----------------|
| Selenium | ND | mg/kg | 0.50 |
| Mercury | ND | mg/kg | 0.10 |
| Lead | ND | mg/kg | 0.50 |
| Arsenic | ND | mg/kg | 0.50 |
| Selenium | ND | mg/kg | 0.50 |
| Aluminum | ND | mg/kg | 50.0 |
| Antimony | ND | mg/kg | 15.0 |
| Barium | ND | mg/kg | 10.0 |
| Beryllium | ND | mg/kg | 1.0 |
| Cadmium | ND | mg/kg | 0.50 |
| Calcium | ND | mg/kg | 100 |

I-200

METHOD BLANK REPORT
Metals Analysis and Preparation (cont.)

| Analyte | Result | Units | Reporting Limit |
|----------------------|----------------------|-------|-----------------|
| Test: ICP-IRPMS-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 13 SEP 94-A | QC Run: 13 SEP 94-A | | |
| Chromium | ND | mg/kg | 5.0 |
| Cobalt | ND | mg/kg | 5.0 |
| Copper | ND | mg/kg | 5.0 |
| Iron | ND | mg/kg | 100 |
| Magnesium | ND | mg/kg | 2.0 |
| Manganese | ND | mg/kg | 10.0 |
| Molybdenum | ND | mg/kg | 15.0 |
| Nickel | ND | mg/kg | 500 |
| Potassium | ND | mg/kg | 5.0 |
| Silver | ND | mg/kg | 500 |
| Sodium | ND | mg/kg | 10.0 |
| Vanadium | ND | mg/kg | 2.0 |
| Zinc | ND | mg/kg | |
| Test: TL-FAA-IRP-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 10 SEP 94-B | QC Run: 10 SEP 94-B | | |
| Thallium | ND | mg/kg | 0.50 |
| Test: HG-CVAA-IRP-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 12 SEP 94-E | QC Run: 12 SEP 94-E | | |
| Mercury | ND | mg/kg | 0.10 |
| Test: PB-FAA-IRP-S | | | |
| Matrix: SOIL | | | |
| QC Lot: 12 SEP 94-DX | QC Run: 12 SEP 94-DX | | |
| Lead | ND | mg/kg | 0.50 |

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METHOD BLANK REPORT
Metals Analysis and Preparation (cont.)

| Analyte | Result | Units | Reporting Limit |
|---|--------|-------|-----------------|
| | | | |
| Test: AS-FAA-IRP-S Matrix: SOIL QC Lot: 12 SEP 94-DX QC Run: 12 SEP 94-DX | | | |
| Arsenic | ND | mg/kg | 0.50 |
| Test: SE-FAA-IRP-S Matrix: SOIL QC Lot: 12 SEP 94-DX QC Run: 12 SEP 94-DX | | | |
| Selenium | ND | mg/kg | 0.50 |
| Test: ICP-IRPMS-S Matrix: SOIL QC Lot: 13 SEP 94-A QC Run: 13 SEP 94-A | | | |
| Aluminum | ND | mg/kg | 50.0 |
| Antimony | ND | mg/kg | 15.0 |
| Barium | ND | mg/kg | 10.0 |
| Beryllium | ND | mg/kg | 1.0 |
| Cadmium | ND | mg/kg | 0.50 |
| Calcium | ND | mg/kg | 100 |
| Chromium | ND | mg/kg | 5.0 |
| Cobalt | ND | mg/kg | 5.0 |
| Copper | ND | mg/kg | 5.0 |
| Iron | ND | mg/kg | 100 |
| Magnesium | ND | mg/kg | 2.0 |
| Manganese | ND | mg/kg | 10.0 |
| Molybdenum | ND | mg/kg | 15.0 |
| Nickel | ND | mg/kg | 500 |
| Potassium | ND | mg/kg | 5.0 |
| Silver | ND | mg/kg | 500 |
| Sodium | ND | mg/kg | 10.0 |
| Vanadium | ND | mg/kg | 2.0 |
| Zinc | | | |

I-202

METHOD BLANK REPORT
Metals Analysis and Preparation (cont.)

| Analyte | Result | Units | Reporting Limit |
|---|--------|-------|-----------------|
| Test: TL-FAA-IRP-S Matrix: SOIL QC Lot: 10 SEP 94-B QC Run: 10 SEP 94-B | ND | mg/kg | 0.50 |
| Thallium | ND | mg/kg | 0.50 |
| Test: TL-FAA-IRP-S Matrix: SOIL QC Lot: 12 SEP 94-DX QC Run: 12 SEP 94-DX | ND | mg/kg | 0.50 |
| Thallium | ND | mg/kg | 0.50 |

I-203

LABORATORY CONTROL SAMPLE REPORT
Metals Analysis and Preparation

| Analyte | Concentration Spiked | Concentration Measured | Accuracy(%) LCS | Limits |
|---|-------------------------|---------------------------|--------------------|--------|
| Category: 7471-IRP-S Mercury by CVAA STATIC QC LIMITS - DO NOT UPDATE | | | | |
| Matrix: SOIL QC Lot: 12 SEP 94-E QC Run: 12 SEP 94-E Concentration Units: mg/kg | | | | |
| Mercury | 32.0 | 27.0 | 84 | 75-125 |
| Analyte | Concentration Spiked | Concentration Measured | Accuracy(%) LCS | Limits |
| Category: 7421-IRP-S Lead, Furnace AA STATIC QC LIMITS - DO NOT UPDATE | | | | |
| Matrix: SOIL QC Lot: 12 SEP 94-DX QC Run: 12 SEP 94-DX Concentration Units: mg/kg | | | | |
| Lead | 50.9 | 50.1 | 98 | 65-135 |
| Analyte | Concentration Spiked | Concentration Measured | Accuracy(%) LCS | Limits |
| Category: 7060-IRP-S Arsenic, Furnace AA STATIC QC LIMITS - DO NOT UPDATE | | | | |
| Matrix: SOIL QC Lot: 12 SEP 94-DX QC Run: 12 SEP 94-DX Concentration Units: mg/kg | | | | |
| Arsenic | 72.1 | 59.7 | 83 | 75-125 |
| Analyte | Concentration Spiked | Concentration Measured | Accuracy(%) LCS | Limits |
| Category: 7740-IRP-S Selenium, Furnace AA STATIC QC LIMITS - DO NOT UPDATE | | | | |
| Matrix: SOIL QC Lot: 12 SEP 94-DX QC Run: 12 SEP 94-DX Concentration Units: mg/kg | | | | |
| Selenium | 74.2 | 85.0 | 115 | 70-130 |

ND = Not Detected

Calculations are performed before rounding to avoid round-off errors in calculated results

7-294

LABORATORY CONTROL SAMPLE REPORT
Metals Analysis and Preparation

(cont.)

| Analyte | Concentration | Concentration | Accuracy(%) |
|---|----------------------|---------------|-------------|
| | Spiked | Measured | LCS Limits |
| Selenium | | | |
| Category: 7740-IRP-S Selenium, Furnace AA STATIC QC LIMITS - DO NOT UPDATE | | | |
| Matrix: SOIL | | | |
| QC Lot: 10 SEP 94-BX | QC Run: 10 SEP 94-BX | | |
| Concentration Units: mg/kg | | | |
| Selenium | 74.2 | 63.0 | 85 70-130 |
| Analyte | Concentration | Concentration | Accuracy(%) |
| | Spiked | Measured | LCS Limits |
| ICP Metals | | | |
| Category: ICP-IRP-S ICP Metals STATIC QC LIMITS - DO NOT UPDATE | | | |
| Matrix: SOIL | | | |
| QC Lot: 13 SEP 94-A | QC Run: 13 SEP 94-A | | |
| Concentration Units: mg/kg | | | |
| Aluminum | 3650 | 3070 | 84 75-140 |
| Antimony | 75.0 | 68.0 | 91 50-150 |
| Arsenic | 72.1 | 72.5 | 101 75-125 |
| Barium | 64.8 | 64.6 | 100 75-125 |
| Beryllium | 26.7 | 28.3 | 106 75-125 |
| Calcium | 2330 | 2370 | 102 75-125 |
| Cadmium | 61.6 | 61.5 | 100 75-125 |
| Chromium | 44.1 | 44.3 | 100 75-125 |
| Copper | 78.1 | 79.1 | 101 75-125 |
| Cobalt | 177 | 187 | 106 75-125 |
| Iron | 7360 | 6180 | 84 75-125 |
| Magnesium | 2550 | 2550 | 100 75-125 |
| Manganese | 141 | 137 | 97 75-125 |
| Molybdenum | 104 | 106 | 102 75-125 |
| Potassium | 3310 | 3420 | 103 75-125 |
| Lead | 50.9 | 53.9 | 106 75-125 |
| Nickel | 110 | 116 | 106 75-125 |
| Selenium | 74.2 | 88.3 | 119 60-140 |
| Silver | 71.7 | 70.7 | 99 75-125 |
| Sodium | 346 | 329 | 95 75-125 |
| Thallium | 64.1 | 62.0 | 97 75-125 |
| Vanadium | 83.0 | 78.7 | 95 75-125 |
| Zinc | 78.2 | 78.1 | 100 75-125 |

ND = Not Detected

Calculations are performed before rounding to avoid round-off errors in calculated results

1-285

LABORATORY CONTROL SAMPLE REPORT
Metals Analysis and Preparation

(cont.)

| Analyte | Concentration | | Accuracy(%) | |
|---------|---------------|----------|-------------|--------|
| | Spiked | Measured | LCS | Limits |

Category: 7841-IRP-S Thallium, Furnace AA
STATIC QC LIMITS - DO NOT UPDATE

Matrix: SOIL
QC Lot: 10 SEP 94-B QC Run: 10 SEP 94-B
Concentration Units: mg/kg

| | | | | |
|----------|------|------|----|--------|
| Thallium | 64.1 | 51.3 | 80 | 65-135 |
|----------|------|------|----|--------|

| Analyte | Concentration | | Accuracy(%) | |
|---------|---------------|----------|-------------|--------|
| | Spiked | Measured | LCS | Limits |

Category: 7841-IRP-S Thallium, Furnace AA
STATIC QC LIMITS - DO NOT UPDATE

Matrix: SOIL
QC Lot: 12 SEP 94-DX QC Run: 12 SEP 94-DX
Concentration Units: mg/kg

| | | | | |
|----------|------|------|----|--------|
| Thallium | 64.1 | 51.3 | 80 | 65-135 |
|----------|------|------|----|--------|

ND = Not Detected

Calculations are performed before rounding to avoid round-off errors in calculated results.

J-206

MATRIX SPECIFIC QC
ASSIGNMENT REPORT
Metals Analysis and Preparation

| QC SAMPLE TYPE | TEST | LABORATORY SAMPLE NUMBER | QC LOT |
|------------------------|---------------|-----------------------------|--------------|
| MATRIX SPIKE DUPLICATE | HG-CVAA-IRP-S | 077507-0010-SD | 12 SEP 94-E |
| MATRIX SPIKE | HG-CVAA-IRP-S | 077507-0010-MS | 12 SEP 94-E |
| MATRIX SPIKE DUPLICATE | PB-FAA-IRP-S | 077507-0010-SD | 12 SEP 94-DX |
| MATRIX SPIKE | PB-FAA-IRP-S | 077507-0010-MS | 12 SEP 94-DX |
| MATRIX SPIKE DUPLICATE | AS-FAA-IRP-S | 077507-0010-SD | 12 SEP 94-DX |
| MATRIX SPIKE | AS-FAA-IRP-S | 077507-0010-MS | 12 SEP 94-DX |
| MATRIX SPIKE DUPLICATE | SE-FAA-IRP-S | 077507-0010-SD | 10 SEP 94-B |
| MATRIX SPIKE | SE-FAA-IRP-S | 077507-0010-MS | 10 SEP 94-B |
| MATRIX SPIKE DUPLICATE | ICP-IRPMS-S | 077507-0010-SD | 13 SEP 94-A |
| MATRIX SPIKE | ICP-IRPMS-S | 077507-0010-MS | 13 SEP 94-A |
| MATRIX SPIKE DUPLICATE | TL-FAA-IRP-S | 077507-0010-SD | - |
| MATRIX SPIKE | TL-FAA-IRP-S | 077507-0010-MS | - |

10-207

MATRIX SPIKE / MATRIX SPIKE DUPLICATE REPORT
Metals Analysis and Preparation

| Analyte | Sample | Concentration | | | Spiked MS | %Recovery MS | % MSD | % RPD |
|----------------------------|--------|-----------------|-----------------|-------|--------------|-----------------|----------|----------|
| | | Matrix Spike | Matrix Spike | Dup | | | | |
| Test: HG-CVAA-IRP-S | | | | | | | | |
| Matrix SOIL | | | | | | | | |
| Sample: 077507-0010 | | | | | | | | |
| Units: mg/kg | | | | | | | | |
| Mercury | ND | 0.26 | 0.25 | 0.28 | 0.28 | 94 | 90 | 4 |
| Test: PB-FAA-IRP-S | | | | | | | | |
| Matrix SOIL | | | | | | | | |
| Sample: 077507-0010 | | | | | | | | |
| Units: mg/kg | | | | | | | | |
| Lead | 3.4 | 5.8 | 5.6 | 2.3 | 2.3 | 106 | 100 | 6 |
| Test: AS-FAA-IRP-S | | | | | | | | |
| Matrix SOIL | | | | | | | | |
| Sample: 077507-0010 | | | | | | | | |
| Units: mg/kg | | | | | | | | |
| Arsenic | 3.1 | 7.2 | 7.5 | 4.5 | 4.5 | 91 | 97 | 7 |
| Test: SE-FAA-IRP-S | | | | | | | | |
| Matrix SOIL | | | | | | | | |
| Sample: 077507-0010 | | | | | | | | |
| Units: mg/kg | | | | | | | | |
| Selenium | ND | 2.7 | 2.9 | 2.3 | 2.3 | 118 | 128 | 9 |
| Test: ICP-IRPMS-S | | | | | | | | |
| Matrix SOIL | | | | | | | | |
| Sample: 077507-0010 | | | | | | | | |
| Units: mg/kg | | | | | | | | |
| Aluminum | 4910 | 7570 | 8060 | 226 | 226 | 1178 | 1395 | 17 |
| Antimony | ND | 30.5 | 30.5 | 56.5 | 56.5 | 54 | 54 | 0 |
| Barium | 275 | 441 | 488 | 226 | 226 | 73 | 94 | 25 |
| Beryllium | ND | 5.3 | 5.5 | 5.6 | 5.6 | 94 | 97 | 3 |
| Cadmium | ND | 4.5 | 4.7 | 5.6 | 5.6 | 80 | 84 | 5 |
| Calcium | 142000 | 141000 | 146000 | 11300 | 11300 | NC | 37 | NC |
| Chromium | 5.6 | 25.5 | 25.8 | 22.6 | 22.6 | 88 | 89 | 2 |

ND = Not detected.

NC = Not calculated, calculation not applicable.

All results and spike amounts are reported on a dry weight basis.

All calculations are performed before rounding to avoid round-off errors in calculated results.

I-208

MATRIX SPIKE / MATRIX SPIKE DUPLICATE REPORT
Metals Analysis and Preparation (cont.)

| Analyte | Sample | Concentration | | Spiked | %Recovery | | % RPD |
|------------|--------|-----------------|---------------------|--------|-----------|-----|----------|
| | | Matrix Spike | Matrix Spike Dup | | MS | MSD | |
| Cobalt | ND | 47.3 | 49.9 | 56.5 | 56.5 | 84 | 88 |
| Copper | ND | 27.4 | 28.0 | 28.2 | 28.2 | 97 | 99 |
| Iron | 4420 | 4990 | 5300 | 113 | 113 | 504 | 782 |
| Magnesium | 3490 | 8570 | 8720 | 5650 | 5650 | 90 | 93 |
| Manganese | 105 | 166 | 147 | 56.5 | 56.5 | 108 | 74 |
| Molybdenum | ND | 18.4 | 19.3 | 22.6 | 22.6 | 81 | 86 |
| Nickel | ND | 49.9 | 51.9 | 56.5 | 56.5 | 88 | 92 |
| Potassium | 931 | 6380 | 6620 | 5650 | 5650 | 97 | 101 |
| Silver | ND | 5.0 | 5.0 | 5.6 | 5.6 | 89 | 89 |
| Sodium | ND | 10200 | 10500 | 11300 | 11300 | 90 | 93 |
| Vanadium | 12.1 | 61.0 | 62.9 | 56.5 | 56.5 | 86 | 90 |
| Zinc | 10.9 | 57.2 | 59.6 | 56.5 | 56.5 | 82 | 86 |

Test: TL-FAA-IRP-S

Matrix SOIL

Sample: 077507-0010

Units: mg/kg

| | | | | | | | | |
|----------|----|-----|-----|-----|-----|----|----|---|
| Thallium | ND | 4.1 | 3.8 | 5.0 | 5.0 | 81 | 77 | 6 |
|----------|----|-----|-----|-----|-----|----|----|---|

ND = Not detected.

NC = Not calculated, calculation not applicable.

All results and spike amounts are reported on a dry weight basis.

All calculations are performed before rounding to avoid round-off errors in calculated results.

I-210

GENERAL INORGANICS**Enseco**
*Corning Environmental Services***(Soil/Solid)****Client Name:** Gram, Inc.**Client ID:** 03010001 (2.00,6.00,)**Lab ID:** 077507-0001-SA**Matrix:** SOIL**Authorized:** 03 SEP 94**Sampled:** 29 AUG 94**Prepared:** See Below**Received:** 03 SEP 94**Analyzed:** See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|---|--------|------------------|-----------------|-------------------|---------------|---------------|
| Cyanide, Total Nitrate + Nitrite (as N) | ND | mg/kg | 0.52 | 9012 Modified | 12 SEP 94 | 12 SEP 94 |
| | 2.3 | mg/kg | 0.26 | 353.2 Modified | 16 SEP 94 | 16 SEP 94 |

Percent Moisture is 4%. All results and limits are reported on a dry weight basis.

ND = Not detected

NA = Not applicable

Reported By: Lori Ann Upton

Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.

Rev 230787

J. D. II

GENERAL INORGANICS

Enseco
Corning Environmental Services

(Soil/Solid)

Client Name: Gram, Inc.

Client ID: 03070001 (2.00,6.00,)

Lab ID: 077507-0002-SA

Matrix: SOIL

Authorized: 03 SEP 94

Sampled: 29 AUG 94

Received: 03 SEP 94

Prepared: See Below

Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|---|------------|------------------|-----------------|---------------------------------|------------------------|--------------------------|
| Cyanide, Total Nitrate + Nitrite (as N) | ND 46.8 | mg/kg mg/kg | 0.54 2.7 | 9012 Modified 353.2 Modified | 12 SEP 94 16 SEP 94 | 12 SEP 94 16 SEP 94 R |

Percent Moisture is 7%. All results and limits are reported on a dry weight basis.

Note R : Raised reporting limit(s) due to high analyte level(s).

ND = Not detected

NA = Not applicable

Reported By: Lori Ann Upton

Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.
Rev 230787

I. A. 2

GENERAL INORGANICS

Enseco
Corning Environmental Service

(Soil/Solid)

Client Name: Gram, Inc.
Client ID: 02310001
Lab ID: 077507-0005-SA
Matrix: SOIL
Authorized: 03 SEP 94

(3.00,6.00,)

Sampled: 30 AUG 94
Prepared: See BelowReceived: 03 SEP 94
Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|---|-----------|------------------|-----------------|---------------------------------|------------------------|------------------------|
| Cyanide, Total Nitrate + Nitrite (as N) | ND 5.5 | mg/kg | 0.52 2.6 | 9012 Modified 353.2 Modified | 12 SEP 94 16 SEP 94 | 12 SEP 94 16 SEP 94 |

Percent Moisture is 4%. All results and limits are reported on a dry weight basis.

ND = Not detected
NA = Not applicable

Reported By: Lori Ann Upton

Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.
Rev 230787

I-213

GENERAL INORGANICS

Enseco
Corning Environmental Services

(Soil/Solid)

Client Name: Gram, Inc.

Client ID: 02310002 (3.00,6.00,)

Lab ID: 077507-0006-SA

Matrix: SOIL

Authorized: 03 SEP 94

Sampled: 30 AUG 94

Received: 03 SEP 94

Prepared: See Below

Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|-----------------------------|--------|------------------|-----------------|-------------------|---------------|---------------|
| Cyanide, Total | ND | mg/kg | 0.52 | 9012 Modified | 12 SEP 94 | 12 SEP 94 |
| Nitrate + Nitrite (as N) | 5.4 | mg/kg | 2.6 | 353.2 Modified | 16 SEP 94 | 16 SEP 94 |

Percent Moisture is 5%. All results and limits are reported on a dry weight basis.

ND = Not detected

NA = Not applicable

Reported By: Lori Ann Upton

Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.
Rev 230787

I-214

GENERAL INORGANICS

Enseco
Corning Environmental Services

(Soil/Solid)

Client Name: Gram, Inc.
Client ID: 02380001
Lab ID: 077507-0007-SA
Matrix: SOIL
Authorized: 03 SEP 94

(2.00,4.00,)

Sampled: 31 AUG 94
Prepared: See Below

Received: 03 SEP 94
Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|---|------------|------------------|-----------------|---------------------------------|------------------------|--------------------------|
| Cyanide, Total Nitrate + Nitrite (as N) | ND 23.1 | mg/kg mg/kg | 0.52 1.3 | 9012 Modified 353.2 Modified | 12 SEP 94 16 SEP 94 | 12 SEP 94 16 SEP 94 R |

Percent Moisture is 5%. All results and limits are reported on a dry weight basis.

Note R : Raised reporting limit(s) due to high analyte level(s).

ND = Not detected

NA = Not applicable

Reported By: Lori Ann Upton

Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.
Rev 230787

T-215

GENERAL INORGANICS**Enseco**
Corning Environmental Services**(Soil/Solid)**

Client Name: Gram, Inc.
Client ID: 02880001 (3.00, 6.00,)
Lab ID: 077507-0008-SA
Matrix: SOIL
Authorized: 03 SEP 94

Sampled: 31 AUG 94
Prepared: See Below

Received: 03 SEP 94
Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|---|-----------|------------------|-----------------|---------------------------------|------------------------|------------------------|
| Cyanide, Total Nitrate + Nitrite (as N) | ND 2.6 | mg/kg mg/kg | 0.59 0.30 | 9012 Modified 353.2 Modified | 12 SEP 94 16 SEP 94 | 12 SEP 94 16 SEP 94 |

Percent Moisture is 15%. All results and limits are reported on a dry weight basis.

ND = Not detected

NA = Not applicable

Reported By: Lori Ann Upton

Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.
Rev 230787

I - 216

GENERAL INORGANICS

Enseco
Corning Environmental Services

(Soil/Solid)

Client Name: Gram, Inc.
Client ID: 02920001
Lab ID: 077507-0009-SA
Matrix: SOIL
Authorized: 03 SEP 94

(3.00,6.00,)

Sampled: 31 AUG 94
Prepared: See BelowReceived: 03 SEP 94
Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|---|-----------|------------------|-----------------|---------------------------------|------------------------|------------------------|
| Cyanide, Total Nitrate + Nitrite (as N) | ND 3.8 | mg/kg mg/kg | 0.56 0.28 | 9012 Modified 353.2 Modified | 12 SEP 94 16 SEP 94 | 12 SEP 94 16 SEP 94 |

Percent Moisture is 11%. All results and limits are reported on a dry weight basis.

ND = Not detected
NA = Not applicable

Reported By: Lori Ann Upton

Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.
Rev 230787

I - 017

GENERAL INORGANICS

Enseco
Corning Environmental Services

(Soil/Solid)

Client Name: Gram, Inc.

Client ID: 02540001 (2.50,6.00,)

Lab ID: 077507-0010-SA

Matrix: SOIL

Authorized: 03 SEP 94

Sampled: 01 SEP 94

Prepared: See Below

Received: 03 SEP 94

Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|---|-----------|------------------|-----------------|---------------------------------|------------------------|--------------------------|
| Cyanide, Total Nitrate + Nitrite (as N) | ND 386 | mg/kg mg/kg | 0.56 14.1 | 9012 Modified 353.2 Modified | 12 SEP 94 16 SEP 94 | 12 SEP 94 16 SEP 94 R |

Percent Moisture is 11%. All results and limits are reported on a dry weight basis.

Note R : Raised reporting limit(s) due to high analyte level(s).

ND = Not detected

NA = Not applicable

Reported By: Lori Ann Upton

Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.
Rev 230787

2 - 318

GENERAL INORGANICS**Enseco**
*Corning Environmental Service***(Soil/Solid)****Client Name:** Gram, Inc.**Client ID:** 02580001 (2.50,6.00,)**Lab ID:** 077507-0012-SA**Matrix:** SOIL**Authorized:** 03 SEP 94**Sampled:** 01 SEP 94**Received:** 03 SEP 94**Prepared:** See Below**Analyzed:** See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|---|--------|------------------|-----------------|------------------------------|---------------------|---------------------|
| Cyanide, Total Nitrate + Nitrite (as N) | ND 1.3 | mg/kg | 0.56 0.28 | 9012 Modified 353.2 Modified | 12 SEP 94 16 SEP 94 | 12 SEP 94 16 SEP 94 |

Percent Moisture is 11%. All results and limits are reported on a dry weight basis.

ND = Not detected

NA = Not applicable

Reported By: Lori Ann Upton

Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.

Rev 230787

7-0/9

GENERAL INORGANICS**(Soil/Solid)**

Client Name: Gram, Inc.
Client ID: 02550001 (2.50,6.00,)
Lab ID: 077507-0011-SA

Matrix: SOIL Sampled: 01 SEP 94 Received: 03 SEP 94
Authorized: 03 SEP 94 Prepared: See Below Analyzed: See Below

| Parameter | Result | Dry Weight Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|---|-----------|------------------|-----------------|---------------------------------|------------------------|------------------------|
| Cyanide, Total Nitrate + Nitrite (as N) | ND 9.9 | mg/kg | 0.55 0.28 | 9012 Modified 353.2 Modified | 12 SEP 94 16 SEP 94 | 12 SEP 94 16 SEP 94 |

Percent Moisture is 10%. All results and limits are reported on a dry weight basis.

ND = Not detected
NA = Not applicable

Reported By: Lori Ann Upton Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.
Rev 230787

1 - 000

MATRIX SPIKE / MATRIX SPIKE DUPLICATE REPORT
Wet Chemistry Analysis and Preparation

| Analyte | Sample | Concentration | | | Spiked MS | %Recovery MS | % MSD | RPD | | | | | |
|--|--------|-----------------|-----------------|-----|--------------|-----------------|----------|-----|--|--|--|--|--|
| | | Matrix Spike | Matrix Spike | Dup | | | | | | | | | |
| <p>Test: N03&N02-S Matrix SOIL Sample: 077507-0010 Units: mg/kg</p> | | | | | | | | | | | | | |
| <p>Nitrate + Nitrite (as N)</p> | | | | | | | | | | | | | |
| | | 386 | 373 | 370 | 2.8 | 2.8 | NC | NC | | | | | |
| <p>Test: CN-9012-IRP-KAFB-S Matrix SOIL Sample: 077507-0010 Units: mg/kg</p> | | | | | | | | | | | | | |
| <p>Cyanide, Total</p> | | | | | | | | | | | | | |
| | | ND | 5.5 | 5.7 | 5.6 | 5.6 | 98 | 102 | | | | | |
| | | | | | | | | 4 | | | | | |

ND = Not detected.

NC = Not calculated, calculation not applicable.

All results and spike amounts are reported on a dry weight basis.

All calculations are performed before rounding to avoid round-off errors in calculated results.

2-001

I - 222

Quanterra West Sacramento
Environmental Services

MEMORANDUM

DATE: October 5, 1994 3:48pm

TO: Jeff Johnson

FROM: Joe Schairer

RE: 077541

Jeff:

Here is the amended case narrative for Quanterra project 077541, which was forwarded to you on 28 September 1994. Also included are the Semivolatile Organics Library Search results.

Please remove the original case narrative from the report and replace it with the attached version. Insert the Library Search data sheets behind their respective sample data sheets.

If I can answer any questions, please call.

Thank you,

Joe

IT-203



Enseco
A Corning Company

September 28, 1994

QUANTERRA PROJECT NUMBER: 077541

PO/CONTRACT: Jeff Johnson

Jeff Johnson
Gram, Inc.
8500 Menaul Blvd. NE, #B-370
Albuquerque, NM 87112

Dear Mr. Johnson:

This report contains the analytical results for the five aqueous samples which were received under chain of custody by Quanterra West Sacramento on 08 September 1994. These samples are associated with your McCormick Ranch, Kirtland AFB project.

The case narrative is an integral part of this report.

If you have any questions, please call me at (916) 374-4362.

Sincerely,



Diana L. Brooks
Project Manager

jas

Enseco - CAL
2544 Industrial Blvd.
West Sacramento, CA 95691-3435
(916) 372-1393
FAX: (916) 372-
1004

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CASE NARRATIVE

QUANTERRA PROJECT NUMBER 077541

General Comments

Only one cooler was received with a temperature blank. The temperature of this blank was recorded at 4.9 degrees Centigrade. The ambient temperatures in the three coolers which samples were received in was recorded as 5.6 degrees Centigrade, 6.4 degrees Centigrade and 6.6 degrees Centigrade.

The pH of the sample in all preserved containers was checked upon receipt and found to be acceptable.

Specialty Explosives by HPLC/MS - Method 8321

The laboratory control sample (LCS) recovered nitroglycerin and PETN above the listed control limits. Presently, the laboratory has not generated enough LCS recovery data to calculate historical limits. Therefore, the control limits used have been designated advisory only. The elevated recoveries in the LCS provide confidence in the analysis ability to detect target analytes at the listed reporting level. Since the samples did not have positive detections of target analytes, the data was accepted.

Semivolatile Organics - Method 8270

The reported duplicate laboratory control sample (DCS) has five compounds with an average recovery above the listed control limits. All of the samples in this project did not have detections of target analytes. The high recoveries in the DCS provide confidence in the analyses ability to detect target analytes at a concentration above the reporting limit.

The sample group was extracted and analyzed with a DCS, as opposed to a MS/SD/LCS, due to limited sample volume.

Due to electronic data deliverable limitations, library search results are available in hardcopy format only.

Amended

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CASE NARRATIVE (continued)

QUANTERRA PROJECT NUMBER 077541

Selected Metals - Various Methods

Analysis for Thallium was performed by Graphite Furnace in order to achieve detection levels required by the QAPjP.

No other anomalies were associated with this report.

QUANTERRA'S QUALITY ASSURANCE PROGRAM

Quanterra has implemented an extensive Quality Assurance (QA) program to ensure the production of scientifically sound, legally defensible data of known documental quality. A key element of this program is Quanterra's Laboratory Control Sample (LCS) system. Controlling lab operations with LCS (as opposed to matrix spike/matrix spike duplicate samples), allows the lab to differentiate between bias as a result of procedural errors versus bias due to matrix effects. The analyst can then identify and implement the appropriate corrective actions at the bench level, without waiting for extensive senior level review or costly and time-consuming sample re-analyses. The LCS program also provides our client with information to assess batch, and overall laboratory performance.

Laboratory Control Samples - (LCS)

Laboratory Control Samples (LCS) are well-characterized, laboratory generated samples used to monitor the laboratory's day-to-day performance of routine analytical methods. The results of the LCS are compared to well-defined laboratory acceptance criteria to determine whether the laboratory system is "in control". Three types of LCS are routinely analyzed: Duplicate Control Samples (DCS), Single Control Samples (SCS), and method blanks. Each of these LCS are described below.

Duplicate Control Samples. A DCS is a well-characterized matrix (blank water, sand, sodium sulfate or celite) which is spiked with certain target parameters and analyzed at approximately 10% of the sample load in order to establish method-specific control limits.

Single Control Samples. An SCS consists of a control matrix that is spiked with surrogate compounds appropriate to the method being used. In cases where no surrogate is available, (e.g. metals or conventional analyses) a single control sample identical to the DCS serves as the control sample. An SCS is prepared for each sample lot. Accuracy is calculated identically to the DCS.

Method Blank Results. A method blank is a laboratory-generated sample which assesses the degree to which laboratory operations and procedures cause false-positive analytical results for your samples.

I - 229

SAMPLE DESCRIPTION INFORMATION
for
Gram, Inc.

| Lab ID | Client ID | | Matrix | Sampled Date | Time | Received Date |
|----------------|-----------|--------------|---------|--------------|-------|---------------|
| 077541-0001-SA | 01661001 | {0.00,0.00,} | AQUEOUS | 07 SEP 94 | 10:30 | 08 SEP 94 |
| 077541-0002-SA | 02461001 | {0.00,0.00,} | AQUEOUS | 07 SEP 94 | 10:30 | 08 SEP 94 |
| 077541-0003-SA | 02462001 | {0.00,0.00,} | AQUEOUS | 07 SEP 94 | 10:30 | 08 SEP 94 |
| 077541-0004-SA | 02471001 | {0.00,0.00,} | AQUEOUS | 07 SEP 94 | 10:30 | 08 SEP 94 |
| 077541-0005-SA | 02481001 | {0.00,0.00,} | AQUEOUS | 07 SEP 94 | 10:30 | 08 SEP 94 |

I-280

E-321

Method 8321

Client Name: Gram, Inc.
Client ID: 01661001 (0.00,0.00,)
Lab ID: 077541-0001-SA
Matrix: AQUEOUS Sampled: 07 SEP 94 Received: 08 SEP 94
Authorized: 08 SEP 94 Prepared: 13 SEP 94 Analyzed: 27 SEP 94

| Parameter | Result | Units | Reporting Limit |
|---------------|--------|-------|-----------------|
| Nitroglycerin | ND | ug/L | 50 |
| PETN | ND | ug/L | 50 |

ND = Not detected
NA = Not applicable

Reported By: Mike Filigenzi

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

1-233

Method 8321

Client Name: Gram, Inc.

Client ID: 02461001 (0.00,0.00,)

Lab ID: 077541-0002-SA

Matrix: AQUEOUS

Authorized: 08 SEP 94

Sampled: 07 SEP 94

Prepared: 13 SEP 94

Received: 08 SEP 94

Analyzed: 27 SEP 94

| Parameter | Result | Units | Reporting Limit |
|---------------|--------|-------|-----------------|
| Nitroglycerin | ND | ug/L | 50 |
| PETN | ND | ug/L | 50 |

ND = Not detected
NA = Not applicable

Reported By: Mike Filigenzi

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

I-024

Method 8321

Client Name: Gram, Inc.
Client ID: 02462001 (0.00,0.00,)
Lab ID: 077541-0003-SA
Matrix: AQUEOUS
Authorized: 08 SEP 94 Sampled: 07 SEP 94 Received: 08 SEP 94
 Prepared: 13 SEP 94 Analyzed: 27 SEP 94

| Parameter | Result | Units | Reporting Limit |
|---------------|--------|-------|-----------------|
| Nitroglycerin | ND | ug/L | 50 |
| PETN | ND | ug/L | 50 |

ND = Not detected
NA = Not applicable

Reported By: Mike Filigenzi

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

I-235

Method 8321

Client Name: Gram, Inc.

Client ID: 02471001 (0.00,0.00,)

Lab ID: 077541-0004-SA

Matrix: AQUEOUS

Authorized: 08 SEP 94

Sampled: 07 SEP 94
Prepared: 13 SEP 94

Received: 08 SEP 94

Analyzed: 27 SEP 94

| Parameter | Result | Units | Reporting Limit |
|---------------|--------|-------|-----------------|
| Nitroglycerin | ND | ug/L | 50 |
| PETN | ND | ug/L | 50 |

ND = Not detected
NA = Not applicable

Reported By: Mike Filigenzi

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

I-D36

Method 8321

Client Name: Gram, Inc.
Client ID: 02481001 (0.00,0.00,)
Lab ID: 077541-0005-SA
Matrix: AQUEOUS Sampled: 07 SEP 94 Received: 08 SEP 94
Authorized: 08 SEP 94 Prepared: 13 SEP 94 Analyzed: 27 SEP 94

| Parameter | Result | Units | Reporting Limit |
|---------------|--------|-------|-----------------|
| Nitroglycerin | ND | ug/L | 50 |
| PETN | ND | ug/L | 50 |

ND = Not detected
NA = Not applicable

Reported By: Mike Filigenzi

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

7-10-94

QC LOT ASSIGNMENT REPORT
Special Services - LC Mass Spectrometry

| Laboratory Sample Number | QC Matrix | QC Category | QC Lot Number (DCS) | QC Run Number (SCS/BLANK) |
|-----------------------------|-----------|-------------|------------------------|------------------------------|
| 077541-0001-SA | AQUEOUS | 8321-IRP-A | 13 SEP 94-7A | 13 SEP 94-7A |
| 077541-0002-SA | AQUEOUS | 8321-IRP-A | 13 SEP 94-7A | 13 SEP 94-7A |
| 077541-0003-SA | AQUEOUS | 8321-IRP-A | 13 SEP 94-7A | 13 SEP 94-7A |
| 077541-0004-SA | AQUEOUS | 8321-IRP-A | 13 SEP 94-7A | 13 SEP 94-7A |
| 077541-0005-SA | AQUEOUS | 8321-IRP-A | 13 SEP 94-7A | 13 SEP 94-7A |

T-038

METHOD BLANK REPORT
Special Services - LC Mass Spectrometry

| Analyte | Result | Units | Reporting Limit |
|---|--------|-------|-----------------|
| Test: 8321-IRP-EXP-A | | | |
| Matrix: AQUEOUS | | | |
| QC Lot: 13 SEP 94-7A QC Run: 13 SEP 94-7A | | | |
| Nitroglycerin | ND | ug/L | 50 |
| PETN | ND | ug/L | 50 |

J-639

LABORATORY CONTROL SAMPLE REPORT
Special Services - LC Mass Spectrometry

| Analyte | Concentration | | Accuracy(%) | |
|--|----------------------|----------|-------------|--------|
| | Spiked | Measured | LCS | Limits |
| Category: 8321-IRP-A Explosives by HPLC/MS | | | | |
| Matrix: AQUEOUS | | | | |
| QC Lot: 13 SEP 94-7A | QC Run: 13 SEP 94-7A | | | |
| Concentration Units: ug/L | | | | |
| Nitroglycerin | 800 | 1230 | 154 | 65-135 |
| PETN | 400 | 577 | 144 | 65-135 |

ND = Not Detected

Calculations are performed before rounding to avoid round-off errors in calculated results.

17-2410

Method 8330

Client Name: Gram, Inc.
 Client ID: 01661001
 Lab ID: 077541-0001-SA
 Matrix: AQUEOUS
 Authorized: 08 SEP 94

Sampled: 07 SEP 94
 Prepared: 13 SEP 94

Received: 08 SEP 94
 Analyzed: 16 SEP 94

| Parameter | Result | Units | Reporting Limit |
|-----------------------|--------|-------|-----------------|
| HMX | ND | ug/L | 13 |
| sym-Trinitrobenzene | ND | ug/L | 7.3 |
| RDX | ND | ug/L | 14 |
| 1,3-Dinitrobenzene | ND | ug/L | 4.0 |
| Nitrobenzene | ND | ug/L | 6.4 |
| 2,4,6-Trinitrotoluene | ND | ug/L | 6.9 |
| Tetryl | ND | ug/L | 4.0 |
| 2,4-Dinitrotoluene | ND | ug/L | 5.7 |
| 2,6-Dinitrotoluene | ND | ug/L | 9.4 |
| 2-Nitrotoluene | ND | ug/L | 12 |
| 4-Nitrotoluene | ND | ug/L | 8.5 |
| 3-Nitrotoluene | ND | ug/L | 7.9 |

ND = Not detected
 NA = Not applicable

Reported By: Dennis Gall

Approved By: Karla Buechler

The cover letter is an integral part of this report.
 Rev 230787

I-341

Nitroaromatics and Nitramines by HPLC

Enseco
Corning Environmental Services

Method 8330

Client Name: Gram, Inc.
Client ID: 02461001
Lab ID: 077541-0002-SA
Matrix: AQUEOUS
Authorized: 08 SEP 94

Sampled: 07 SEP 94
Prepared: 13 SEP 94

Received: 08 SEP 94
Analyzed: 16 SEP 94

| Parameter | Result | Units | Reporting Limit |
|-----------------------|--------|-------|-----------------|
| HMX | ND | ug/L | 13 |
| sym-Trinitrobenzene | ND | ug/L | 7.3 |
| RDX | ND | ug/L | 14 |
| 1,3-Dinitrobenzene | ND | ug/L | 4.0 |
| Nitrobenzene | ND | ug/L | 6.4 |
| 2,4,6-Trinitrotoluene | ND | ug/L | 6.9 |
| Tetryl | ND | ug/L | 4.0 |
| 2,4-Dinitrotoluene | ND | ug/L | 5.7 |
| 2,6-Dinitrotoluene | ND | ug/L | 9.4 |
| 2-Nitrotoluene | ND | ug/L | 12 |
| 4-Nitrotoluene | ND | ug/L | 8.5 |
| 3-Nitrotoluene | ND | ug/L | 7.9 |

ND = Not detected
NA = Not applicable

Reported By: Dennis Gall

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

In 2612

Method 8330

Client Name: Gram, Inc.
 Client ID: 02462001
 Lab ID: 077541-0003-SA
 Matrix: AQUEOUS
 Authorized: 08 SEP 94

Sampled: 07 SEP 94
 Prepared: 13 SEP 94

Received: 08 SEP 94
 Analyzed: 16 SEP 94

| Parameter | Result | Units | Reporting Limit |
|-----------------------|--------|-------|-----------------|
| HMX | ND | ug/L | 13 |
| sym-Trinitrobenzene | ND | ug/L | 7.3 |
| RDX | ND | ug/L | 14 |
| 1,3-Dinitrobenzene | ND | ug/L | 4.0 |
| Nitrobenzene | ND | ug/L | 6.4 |
| 2,4,6-Trinitrotoluene | ND | ug/L | 6.9 |
| Tetryl | ND | ug/L | 4.0 |
| 2,4-Dinitrotoluene | ND | ug/L | 5.7 |
| 2,6-Dinitrotoluene | ND | ug/L | 9.4 |
| 2-Nitrotoluene | ND | ug/L | 12 |
| 4-Nitrotoluene | ND | ug/L | 8.5 |
| 3-Nitrotoluene | ND | ug/L | 7.9 |

ND = Not detected
 NA = Not applicable

Reported By: Dennis Gall

Approved By: Karla Buechler

The cover letter is an integral part of this report.
 Rev 230787

II-24/3

Nitroaromatics and Nitramines by HPLC

Enseco
Corning Environmental Services

Method 8330

Client Name: Gram, Inc.

Client ID: 02471001 (0.00,0.00,)

Lab ID: 077541-0004-SA

Matrix: AQUEOUS

Authorized: 08 SEP 94

Sampled: 07 SEP 94

Prepared: 13 SEP 94

Received: 08 SEP 94

Analyzed: 16 SEP 94

| Parameter | Result | Units | Reporting Limit |
|-----------------------|--------|-------|-----------------|
| HMX | ND | ug/L | 13 |
| sym-Trinitrobenzene | ND | ug/L | 7.3 |
| RDX | ND | ug/L | 14 |
| 1,3-Dinitrobenzene | ND | ug/L | 4.0 |
| Nitrobenzene | ND | ug/L | 6.4 |
| 2,4,6-Trinitrotoluene | ND | ug/L | 6.9 |
| Tetryl | ND | ug/L | 4.0 |
| 2,4-Dinitrotoluene | ND | ug/L | 5.7 |
| 2,6-Dinitrotoluene | ND | ug/L | 9.4 |
| 2-Nitrotoluene | ND | ug/L | 12 |
| 4-Nitrotoluene | ND | ug/L | 8.5 |
| 3-Nitrotoluene | ND | ug/L | 7.9 |

ND = Not detected

NA = Not applicable

Reported By: Dennis Gall

Approved By: Karla Buechler

The cover letter is an integral part of this report.
Rev 230787

10/21/94

Method 8330

Client Name: Gram, Inc.
 Client ID: 02481001
 Lab ID: 077541-0005-SA
 Matrix: AQUEOUS
 Authorized: 08 SEP 94

Sampled: 07 SEP 94
 Prepared: 13 SEP 94

Received: 08 SEP 94
 Analyzed: 16 SEP 94

| Parameter | Result | Units | Reporting Limit |
|-----------------------|--------|-------|-----------------|
| HMX | ND | ug/L | 13 |
| sym-Trinitrobenzene | ND | ug/L | 7.3 |
| RDX | ND | ug/L | 14 |
| 1,3-Dinitrobenzene | ND | ug/L | 4.0 |
| Nitrobenzene | ND | ug/L | 6.4 |
| 2,4,6-Trinitrotoluene | ND | ug/L | 6.9 |
| Tetryl | ND | ug/L | 4.0 |
| 2,4-Dinitrotoluene | ND | ug/L | 5.7 |
| 2,6-Dinitrotoluene | ND | ug/L | 9.4 |
| 2-Nitrotoluene | ND | ug/L | 12 |
| 4-Nitrotoluene | ND | ug/L | 8.5 |
| 3-Nitrotoluene | ND | ug/L | 7.9 |

ND = Not detected
 NA = Not applicable

Reported By: Dennis Gall

Approved By: Karla Buechler

The cover letter is an integral part of this report.
 Rev 230787

7-24/5

QC LOT ASSIGNMENT REPORT
Special Services - LC Mass Spectrometry

| Laboratory Sample Number | QC Matrix | QC Category | QC Lot Number (DCS) | QC Run Number (SCS/BLANK) |
|-----------------------------|-----------|-------------|------------------------|------------------------------|
| 077541-0001-SA | AQUEOUS | 8330-COE-A | 13 SEP 94-7A | 13 SEP 94-7A |
| 077541-0002-SA | AQUEOUS | 8330-COE-A | 13 SEP 94-7A | 13 SEP 94-7A |
| 077541-0003-SA | AQUEOUS | 8330-COE-A | 13 SEP 94-7A | 13 SEP 94-7A |
| 077541-0004-SA | AQUEOUS | 8330-COE-A | 13 SEP 94-7A | 13 SEP 94-7A |
| 077541-0005-SA | AQUEOUS | 8330-COE-A | 13 SEP 94-7A | 13 SEP 94-7A |

12-046

METHOD BLANK REPORT
Special Services - LC Mass Spectrometry

| Analyte | Result | Units | Reporting Limit |
|---|--------|-------|-----------------|
| Test: 8330-IRPMS-1C-A | | | |
| Matrix: AQUEOUS | | | |
| QC Lot: 13 SEP 94-7A QC Run: 13 SEP 94-7A | | | |
| HMX | ND | ug/L | 13 |
| sym-Trinitrobenzene | ND | ug/L | 7.3 |
| RDX | ND | ug/L | 14 |
| 1,3-Dinitrobenzene | ND | ug/L | 4.0 |
| Nitrobenzene | ND | ug/L | 6.4 |
| 2,4,6-Trinitrotoluene | ND | ug/L | 6.9 |
| Tetryl | ND | ug/L | 4.0 |
| 2,4-Dinitrotoluene | ND | ug/L | 5.7 |
| 2,6-Dinitrotoluene | ND | ug/L | 9.4 |
| 2-Nitrotoluene | ND | ug/L | 12 |
| 4-Nitrotoluene | ND | ug/L | 8.5 |
| 3-Nitrotoluene | ND | ug/L | 7.9 |

J. 24/7

LABORATORY CONTROL SAMPLE REPORT
Special Services - LC Mass Spectrometry

| Analyte | Concentration | Accuracy(%) | | | |
|--|---------------|-------------|-----|--------|--|
| | Spiked | Measured | LCS | Limits | |
| Category: 8330-COE-A Explosives by HPLC | | | | | |
| Matrix: AQUEOUS | | | | | |
| QC Lot: 13 SEP 94-7A QC Run: 13 SEP 94-7A | | | | | |
| Concentration Units: ug/L | | | | | |
| HMX | 50.0 | 47.9 | 96 | 65-135 | |
| sym-Trinitrobenzene | 50.0 | 51.5 | 103 | 65-135 | |
| RDX | 50.0 | 45.1 | 90 | 65-135 | |
| 1,3-Dinitrobenzene | 50.0 | 47.6 | 95 | 65-135 | |
| Nitrobenzene | 50.0 | 46.0 | 92 | 65-135 | |
| 2,4,6-Trinitrotoluene | 50.0 | 50.5 | 101 | 65-135 | |
| Tetryl | 50.0 | 54.4 | 109 | 50-110 | |
| 2,4-Dinitrotoluene | 50.0 | 50.9 | 102 | 65-135 | |
| 2,6-Dinitrotoluene | 50.0 | 50.7 | 101 | 65-135 | |
| 2-Am-DNT | 50.0 | 49.3 | 99 | 65-135 | |
| 4-Am-DNT | 50.0 | 49.0 | 98 | 65-135 | |
| 2-Nitrotoluene | 50.0 | 49.6 | 99 | 65-135 | |
| 4-Nitrotoluene | 50.0 | 49.7 | 99 | 65-135 | |
| 3-Nitrotoluene | 50.0 | 49.4 | 99 | 65-135 | |

ND = Not Detected

Calculations are performed before rounding to avoid round-off errors in calculated results.

7-2-48

Semivolatile Organics

Enseco
Former Environmental Services

Method 8270

Client Name: Gram, Inc.
 Client ID: 01661001
 Lab ID: 077541-0001-SA
 Matrix: AQUEOUS
 Authorized: 08 SEP 94

(0.00,0.00,)

Sampled: 07 SEP 94
 Prepared: 14 SEP 94

Received: 08 SEP 94
 Analyzed: 21 SEP 94

| Parameter | Result | Units | Reporting Limit |
|------------------------------|--------|-------|-----------------|
| Acenaphthene | ND | ug/L | 10 |
| Acenaphthylene | ND | ug/L | 10 |
| Anthracene | ND | ug/L | 10 |
| Benzo(a)anthracene | ND | ug/L | 10 |
| Benzo(a)pyrene | ND | ug/L | 10 |
| Benzo(b)fluoranthene | ND | ug/L | 10 |
| 2,2'-Oxybis(1-chloropropane) | ND | ug/L | 10 |
| Benzo(g,h,i)perylene | ND | ug/L | 10 |
| Benzo(k)fluoranthene | ND | ug/L | 10 |
| Benzoic acid | ND | ug/L | 50 |
| Benzyl alcohol | ND | ug/L | 20 |
| 4-Bromophenyl phenyl ether | ND | ug/L | 10 |
| Butyl benzyl phthalate | ND | ug/L | 10 |
| bis(2-Chloroethoxy)- methane | ND | ug/L | 10 |
| bis(2-Chloroethyl) ether | ND | ug/L | 10 |
| 4-Chloro-3-methylphenol | ND | ug/L | 20 |
| 2-Chloronaphthalene | ND | ug/L | 10 |
| 2-Chlorophenol | ND | ug/L | 10 |
| 4-Chlorophenyl phenyl ether | ND | ug/L | 10 |
| 4-Chloroaniline | ND | ug/L | 20 |
| Chrysene | ND | ug/L | 10 |
| Di-n-butyl phthalate | ND | ug/L | 10 |
| Dibenz(a,h)anthracene | ND | ug/L | 10 |
| Dibenzofuran | ND | ug/L | 10 |
| 1,2-Dichlorobenzene | ND | ug/L | 10 |
| 1,3-Dichlorobenzene | ND | ug/L | 10 |
| 1,4-Dichlorobenzene | ND | ug/L | 10 |
| 3,3'-Dichlorobenzidine | ND | ug/L | 20 |
| 2,4-Dichlorophenol | ND | ug/L | 10 |
| Diethyl phthalate | ND | ug/L | 10 |
| 2,4-Dimethylphenol | ND | ug/L | 10 |
| Dimethyl phthalate | ND | ug/L | 10 |
| 4,6-Dinitro- 2-methylphenol | ND | ug/L | 50 |
| 2,4-Dinitrophenol | ND | ug/L | 50 |
| 2,4-Dinitrotoluene | ND | ug/L | 10 |
| 2,6-Dinitrotoluene | ND | ug/L | 10 |
| Di-n-octyl phthalate | ND | ug/L | 10 |

(continued on following page)

ND = Not detected
 NA = Not applicable

Reported By: Chris Jenkins

Approved By: Steve Rogers

The cover letter is an integral part of this report.
 Rev 230787

J-049

Semivolatile Organics

Enseco
Corning Environmental Services

Method 8270

Client Name: Gram, Inc.
Client ID: 01661001 (0.00,0.00,)
Lab ID: 077541-0001-SA
Matrix: AQUEOUS
Authorized: 08 SEP 94

Sampled: 07 SEP 94
Prepared: 14 SEP 94

Received: 08 SEP 94
Analyzed: 21 SEP 94

| Parameter | Result | Units | Reporting Limit |
|-----------------------------|--------|-------|-----------------|
| bis(2-Ethylhexyl)-phthalate | ND | ug/L | 10 |
| Fluoranthene | ND | ug/L | 10 |
| Fluorene | ND | ug/L | 10 |
| Hexachlorobenzene | ND | ug/L | 10 |
| Hexachlorobutadiene | ND | ug/L | 10 |
| Hexachlorocyclopentadiene | ND | ug/L | 10 |
| Hexachloroethane | ND | ug/L | 10 |
| Indeno(1,2,3-cd)pyrene | ND | ug/L | 10 |
| Isophorone | ND | ug/L | 10 |
| 2-Methylnaphthalene | ND | ug/L | 10 |
| 2-Methylphenol | ND | ug/L | 10 |
| 4-Methylphenol | ND | ug/L | 10 |
| Naphthalene | ND | ug/L | 10 |
| 2-Nitroaniline | ND | ug/L | 50 |
| 3-Nitroaniline | ND | ug/L | 50 |
| 4-Nitroaniline | ND | ug/L | 50 |
| Nitrobenzene | ND | ug/L | 10 |
| 2-Nitrophenol | ND | ug/L | 10 |
| 4-Nitrophenol | ND | ug/L | 50 |
| N-Nitrosodiphenylamine | ND | ug/L | 10 |
| N-Nitroso-di-n-propylamine | ND | ug/L | 10 |
| Pentachlorophenol | ND | ug/L | 50 |
| Phenanthrene | ND | ug/L | 10 |
| Phenol | ND | ug/L | 10 |
| Pyrene | ND | ug/L | 10 |
| 1,2,4-Trichlorobenzene | ND | ug/L | 10 |
| 2,4,5-Trichlorophenol | ND | ug/L | 50 |
| 2,4,6-Trichlorophenol | ND | ug/L | 10 |
| Surrogate | | | |
| Recovery | | | |
| Nitrobenzene-d5 | 93 | % | |
| 2-Fluorobiphenyl | 94 | % | |
| Terphenyl-d14 | 95 | % | |
| Phenol-d5 | 34 | % | |
| 2-Fluorophenol | 52 | % | |
| 2,4,6-Tribromophenol | 67 | % | |

ND = Not detected

NA = Not applicable

Reported By: Chris Jenkins

Approved By: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

1050

Semivolatile Organics

Library Search

Method 8270

Client Name: Gram, Inc.

Client ID: 01661001

Lab ID: 077541-0001-SA

Matrix: AQUEOUS

Authorized: 08 Sep 94

Sampled: 07 Sep 94 Received: 08 Sep 94
Prepared: 14 Sep 94 Analyzed: 21 Sep 94

There were no tentatively identified compounds discovered for this sample.

ND=Not Detected

NA=Not Applicable

Reported by: Chris Jenkins

Approved by: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

IT-251

Semivolatile Organics

Enseco
Corning Environmental Services

Method 8270

Client Name: Gram, Inc.
Client ID: 02461001
Lab ID: 077541-0002-SA
Matrix: AQUEOUS
Authorized: 08 SEP 94

(0.00,0.00,)

Sampled: 07 SEP 94
Prepared: 14 SEP 94Received: 08 SEP 94
Analyzed: 21 SEP 94

| Parameter | Result | Units | Reporting Limit |
|------------------------------|--------|-------|-----------------|
| Acenaphthene | ND | ug/L | 10 |
| Acenaphthylene | ND | ug/L | 10 |
| Anthracene | ND | ug/L | 10 |
| Benzo(a)anthracene | ND | ug/L | 10 |
| Benzo(a)pyrene | ND | ug/L | 10 |
| Benzo(b)fluoranthene | ND | ug/L | 10 |
| Benzo(g,h,i)perylene | ND | ug/L | 10 |
| 2,2'-Oxybis(1-chloropropane) | ND | ug/L | 10 |
| Benzo(k)fluoranthene | ND | ug/L | 10 |
| Benzoic acid | ND | ug/L | 50 |
| Benzyl alcohol | ND | ug/L | 20 |
| 4-Bromophenyl phenyl ether | ND | ug/L | 10 |
| Butyl benzyl phthalate | ND | ug/L | 10 |
| bis(2-Chloroethoxy)-methane | ND | ug/L | 10 |
| bis(2-Chloroethyl) ether | ND | ug/L | 10 |
| 4-Chloro-3-methylphenol | ND | ug/L | 20 |
| 2-Chloronaphthalene | ND | ug/L | 10 |
| 2-Chlorophenol | ND | ug/L | 10 |
| 4-Chloroaniline | ND | ug/L | 20 |
| 4-Chlorophenyl phenyl ether | ND | ug/L | 10 |
| Chrysene | ND | ug/L | 10 |
| Di-n-butyl phthalate | ND | ug/L | 10 |
| Dibenz(a,h)anthracene | ND | ug/L | 10 |
| Dibenzofuran | ND | ug/L | 10 |
| 1,2-Dichlorobenzene | ND | ug/L | 10 |
| 1,3-Dichlorobenzene | ND | ug/L | 10 |
| 1,4-Dichlorobenzene | ND | ug/L | 10 |
| 3,3'-Dichlorobenzidine | ND | ug/L | 20 |
| 2,4-Dichlorophenol | ND | ug/L | 10 |
| Diethyl phthalate | ND | ug/L | 10 |
| 2,4-Dimethylphenol | ND | ug/L | 10 |
| Dimethyl phthalate | ND | ug/L | 10 |
| 4,6-Dinitro-2-methylphenol | ND | ug/L | 50 |
| 2,4-Dinitrophenol | ND | ug/L | 50 |
| 2,4-Dinitrotoluene | ND | ug/L | 10 |
| 2,6-Dinitrotoluene | ND | ug/L | 10 |
| Di-n-octyl phthalate | ND | ug/L | 10 |

(continued on following page)

ND = Not detected
NA = Not applicable

Reported By: Chris Jenkins

Approved By: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

I-252

Semivolatile Organics

Enseco
Corning Environmental Services

Method 8270

Client Name: Gram, Inc.
 Client ID: 02461001
 Lab ID: 077541-0002-SA
 Matrix: AQUEOUS
 Authorized: 08 SEP 94

Sampled: 07 SEP 94
 Prepared: 14 SEP 94

Received: 08 SEP 94
 Analyzed: 21 SEP 94

| Parameter | Result | Units | Reporting Limit |
|-----------------------------|--------|-------|-----------------|
| bis(2-Ethylhexyl)-phthalate | ND | ug/L | 10 |
| Fluoranthene | ND | ug/L | 10 |
| Fluorene | ND | ug/L | 10 |
| Hexachlorobenzene | ND | ug/L | 10 |
| Hexachlorobutadiene | ND | ug/L | 10 |
| Hexachlorocyclopentadiene | ND | ug/L | 10 |
| Hexachloroethane | ND | ug/L | 10 |
| Indeno(1,2,3-cd)pyrene | ND | ug/L | 10 |
| Isophorone | ND | ug/L | 10 |
| 2-Methylnaphthalene | ND | ug/L | 10 |
| 2-Methylphenol | ND | ug/L | 10 |
| 4-Methylphenol | ND | ug/L | 10 |
| Naphthalene | ND | ug/L | 10 |
| 2-Nitroaniline | ND | ug/L | 50 |
| 3-Nitroaniline | ND | ug/L | 50 |
| 4-Nitroaniline | ND | ug/L | 50 |
| Nitrobenzene | ND | ug/L | 10 |
| 2-Nitrophenol | ND | ug/L | 10 |
| 4-Nitrophenol | ND | ug/L | 50 |
| N-Nitrosodiphenylamine | ND | ug/L | 10 |
| N-Nitroso-di-n-propylamine | ND | ug/L | 10 |
| Pentachlorophenol | ND | ug/L | 50 |
| Phenanthrene | ND | ug/L | 10 |
| Phenol | ND | ug/L | 10 |
| Pyrene | ND | ug/L | 10 |
| 1,2,4-Trichlorobenzene | ND | ug/L | 10 |
| 2,4,5-Trichlorophenol | ND | ug/L | 50 |
| 2,4,6-Trichlorophenol | ND | ug/L | 10 |

| Surrogate | Recovery |
|----------------------|----------|
| Nitrobenzene-d5 | 87 |
| 2-Fluorobiphenyl | 91 |
| Terphenyl-d14 | 87 |
| Phenol-d5 | 33 |
| 2-Fluorophenol | 49 |
| 2,4,6-Tribromophenol | 63 |

ND = Not detected

NA = Not applicable

Reported By: Chris Jenkins

Approved By: Steve Rogers

The cover letter is an integral part of this report.
 Rev 230787

I-253

Semivolatile Organics

Library Search

Method 8270

Client Name: Gram, Inc.

Client ID: 02461001

Lab ID: 077541-0002-SA

Matrix: AQUEOUS

Authorized: 08 Sep 94

Sampled: 07 Sep 94 Received: 08 Sep 94

Prepared: 14 Sep 94

Analyzed: 21 Sep 94

There were no tentatively identified compounds discovered for this sample.

ND=Not Detected

NA=Not Applicable

Reported by: Chris Jenkins

Approved by: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

I-254

Semivolatile Organics

Method 8270

Client Name: Gram, Inc.
Client ID: 02462001
Lab ID: 077541-0003-SA
Matrix: AQUEOUS
Authorized: 08 SEP 94

(0.00,0.00,)

Sampled: 07 SEP 94
Prepared: 14 SEP 94

Received: 08 SEP 94
Analyzed: 21 SEP 94

| Parameter | Result | Units | Reporting Limit |
|------------------------------|--------|-------|-----------------|
| Acenaphthene | ND | ug/L | 10 |
| Acenaphthylene | ND | ug/L | 10 |
| Anthracene | ND | ug/L | 10 |
| Benzo(a)anthracene | ND | ug/L | 10 |
| Benzo(a)pyrene | ND | ug/L | 10 |
| Benzo(b)fluoranthene | ND | ug/L | 10 |
| 2,2'-Oxybis(1-chloropropane) | ND | ug/L | 10 |
| Benzo(g,h,i)perylene | ND | ug/L | 10 |
| Benzo(k)fluoranthene | ND | ug/L | 10 |
| Benzoic acid | ND | ug/L | 50 |
| Benzyl alcohol | ND | ug/L | 20 |
| 4-Bromophenyl phenyl ether | ND | ug/L | 10 |
| Butyl benzyl phthalate | ND | ug/L | 10 |
| bis(2-Chloroethoxy)-methane | ND | ug/L | 10 |
| bis(2-Chloroethyl) ether | ND | ug/L | 10 |
| 4-Chloro-3-methylphenol | ND | ug/L | 20 |
| 2-Chloronaphthalene | ND | ug/L | 10 |
| 2-Chlorophenol | ND | ug/L | 10 |
| 4-Chloroaniline | ND | ug/L | 20 |
| 4-Chlorophenyl phenyl ether | ND | ug/L | 10 |
| Chrysene | ND | ug/L | 10 |
| Di-n-butyl phthalate | ND | ug/L | 10 |
| Dibenz(a,h)anthracene | ND | ug/L | 10 |
| Dibenzofuran | ND | ug/L | 10 |
| 1,2-Dichlorobenzene | ND | ug/L | 10 |
| 1,3-Dichlorobenzene | ND | ug/L | 10 |
| 1,4-Dichlorobenzene | ND | ug/L | 10 |
| 3,3'-Dichlorobenzidine | ND | ug/L | 20 |
| 2,4-Dichlorophenol | ND | ug/L | 10 |
| Diethyl phthalate | ND | ug/L | 10 |
| 2,4-Dimethylphenol | ND | ug/L | 10 |
| Dimethyl phthalate | ND | ug/L | 10 |
| 4,6-Dinitro-2-methylphenol | ND | ug/L | 50 |
| 2,4-Dinitrophenol | ND | ug/L | 50 |
| 2,4-Dinitrotoluene | ND | ug/L | 10 |
| 2,6-Dinitrotoluene | ND | ug/L | 10 |
| Di-n-octyl phthalate | ND | ug/L | 10 |

(continued on following page)

ND = Not detected
NA = Not applicable

Reported By: Chris Jenkins

Approved By: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

1-255

Semivolatile Organics

Enseco
Comtex Environmental Services

Method 8270

Client Name: Gram, Inc.
Client ID: 02462001 (0.00,0.00,)
Lab ID: 077541-0003-SA
Matrix: AQUEOUS
Authorized: 08 SEP 94

Sampled: 07 SEP 94
Prepared: 14 SEP 94

Received: 08 SEP 94
Analyzed: 21 SEP 94

| Parameter | Result | Units | Reporting Limit |
|-----------------------------|--------|-------|-----------------|
| bis(2-Ethylhexyl)-phthalate | ND | ug/L | 10 |
| Fluoranthene | ND | ug/L | 10 |
| Fluorene | ND | ug/L | 10 |
| Hexachlorobenzene | ND | ug/L | 10 |
| Hexachlorobutadiene | ND | ug/L | 10 |
| Hexachlorocyclopentadiene | ND | ug/L | 10 |
| Hexachloroethane | ND | ug/L | 10 |
| Indeno(1,2,3-cd)pyrene | ND | ug/L | 10 |
| Isophorone | ND | ug/L | 10 |
| 2-Methylnaphthalene | ND | ug/L | 10 |
| 2-Methylphenol | ND | ug/L | 10 |
| 4-Methylphenol | ND | ug/L | 10 |
| Naphthalene | ND | ug/L | 10 |
| 2-Nitroaniline | ND | ug/L | 50 |
| 3-Nitroaniline | ND | ug/L | 50 |
| 4-Nitroaniline | ND | ug/L | 50 |
| Nitrobenzene | ND | ug/L | 10 |
| 2-Nitrophenol | ND | ug/L | 10 |
| 4-Nitrophenol | ND | ug/L | 50 |
| N-Nitrosodiphenylamine | ND | ug/L | 10 |
| N-Nitroso-di-n-propylamine | ND | ug/L | 10 |
| Pentachlorophenol | ND | ug/L | 50 |
| Phenanthrene | ND | ug/L | 10 |
| Phenol | ND | ug/L | 10 |
| Pyrene | ND | ug/L | 10 |
| 1,2,4-Trichlorobenzene | ND | ug/L | 10 |
| 2,4,5-Trichlorophenol | ND | ug/L | 50 |
| 2,4,6-Trichlorophenol | ND | ug/L | 10 |
| Surrogate | | | |
| Recovery | | | |
| Nitrobenzene-d5 | 95 | % | |
| 2-Fluorobiphenyl | 92 | % | |
| Terphenyl-d14 | 95 | % | |
| Phenol-d5 | 40 | % | |
| 2-Fluorophenol | 57 | % | |
| 2,4,6-Tribromophenol | 69 | % | |

ND = Not detected

NA = Not applicable

Reported By: Chris Jenkins

Approved By: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

T-256

Semivolatile Organics

Library Search

Method 8270

Client Name: Gram, Inc.

Client ID: 02462001

Lab ID: 077541-0003-SA

Matrix: AQUEOUS

Authorized: 08 Sep 94

Sampled: 07 Sep 94 Received: 08 Sep 94

Prepared: 14 Sep 94

Analyzed: 21 Sep 94

There were no tentatively identified compounds discovered for this sample.

ND=Not Detected

NA=Not Applicable

Reported by: Chris Jenkins

Approved by: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

IE-207

Semivolatile Organics

Enseco
Corning Environmental Services

Method 8270

Client Name: Gram, Inc.
 Client ID: 02471001
 Lab ID: 077541-0004-SA
 Matrix: AQUEOUS
 Authorized: 08 SEP 94

Sampled: 07 SEP 94
 Prepared: 14 SEP 94

Received: 08 SEP 94
 Analyzed: 21 SEP 94

| Parameter | Result | Units | Reporting Limit |
|------------------------------|--------|-------|-----------------|
| Acenaphthene | ND | ug/L | 10 |
| Acenaphthylene | ND | ug/L | 10 |
| Anthracene | ND | ug/L | 10 |
| Benzo(a)anthracene | ND | ug/L | 10 |
| Benzo(a)pyrene | ND | ug/L | 10 |
| Benzo(b)fluoranthene | ND | ug/L | 10 |
| Benzo(g,h,i)perylene | ND | ug/L | 10 |
| 2,2'-Oxybis(1-chloropropane) | ND | ug/L | 10 |
| Benzo(k)fluoranthene | ND | ug/L | 10 |
| Benzoic acid | ND | ug/L | 50 |
| Benzyl alcohol | ND | ug/L | 20 |
| 4-Bromophenyl phenyl ether | ND | ug/L | 10 |
| Butyl benzyl phthalate | ND | ug/L | 10 |
| bis(2-Chloroethoxy)-methane | ND | ug/L | 10 |
| bis(2-Chloroethyl) ether | ND | ug/L | 10 |
| 4-Chloro-3-methylphenol | ND | ug/L | 20 |
| 2-Chloronaphthalene | ND | ug/L | 10 |
| 2-Chlorophenol | ND | ug/L | 10 |
| 4-Chlorophenyl phenyl ether | ND | ug/L | 10 |
| 4-Chloroaniline | ND | ug/L | 20 |
| Chrysene | ND | ug/L | 10 |
| Di-n-butyl phthalate | ND | ug/L | 10 |
| Dibenz(a,h)anthracene | ND | ug/L | 10 |
| Dibenzofuran | ND | ug/L | 10 |
| 1,2-Dichlorobenzene | ND | ug/L | 10 |
| 1,3-Dichlorobenzene | ND | ug/L | 10 |
| 1,4-Dichlorobenzene | ND | ug/L | 10 |
| 3,3'-Dichlorobenzidine | ND | ug/L | 20 |
| 2,4-Dichlorophenol | ND | ug/L | 10 |
| Diethyl phthalate | ND | ug/L | 10 |
| 2,4-Dimethylphenol | ND | ug/L | 10 |
| Dimethyl phthalate | ND | ug/L | 10 |
| 4,6-Dinitro-2-methylphenol | ND | ug/L | 50 |
| 2,4-Dinitrophenol | ND | ug/L | 50 |
| 2,4-Dinitrotoluene | ND | ug/L | 10 |
| 2,6-Dinitrotoluene | ND | ug/L | 10 |
| Di-n-octyl phthalate | ND | ug/L | 10 |

(continued on following page)

ND = Not detected
 NA = Not applicable

Reported By: Chris Jenkins

Approved By: Steve Rogers

The cover letter is an integral part of this report.
 Rev 230787

7-258

Semivolatile Organics

Enseco
Corning Environmental Services

Method 8270

Client Name: Gram, Inc.
 Client ID: 02471001
 Lab ID: 077541-0004-SA
 Matrix: AQUEOUS
 Authorized: 08 SEP 94

(0.00,0.00,)

Sampled: 07 SEP 94
Prepared: 14 SEP 94Received: 08 SEP 94
Analyzed: 21 SEP 94

| Parameter | Result | Units | Reporting Limit |
|-----------------------------|--------|-------|-----------------|
| bis(2-Ethylhexyl)-phthalate | ND | ug/L | 10 |
| Fluoranthene | ND | ug/L | 10 |
| Fluorene | ND | ug/L | 10 |
| Hexachlorobenzene | ND | ug/L | 10 |
| Hexachlorobutadiene | ND | ug/L | 10 |
| Hexachlorocyclopentadiene | ND | ug/L | 10 |
| Hexachloroethane | ND | ug/L | 10 |
| Indeno(1,2,3-cd)pyrene | ND | ug/L | 10 |
| Isophorone | ND | ug/L | 10 |
| 2-Methylnaphthalene | ND | ug/L | 10 |
| 2-Methylphenol | ND | ug/L | 10 |
| 4-Methylphenol | ND | ug/L | 10 |
| Naphthalene | ND | ug/L | 10 |
| 2-Nitroaniline | ND | ug/L | 50 |
| 3-Nitroaniline | ND | ug/L | 50 |
| 4-Nitroaniline | ND | ug/L | 50 |
| Nitrobenzene | ND | ug/L | 10 |
| 2-Nitrophenol | ND | ug/L | 10 |
| 4-Nitrophenol | ND | ug/L | 50 |
| N-Nitrosodiphenylamine | ND | ug/L | 10 |
| N-Nitroso-di-n-propylamine | ND | ug/L | 10 |
| Pentachlorophenol | ND | ug/L | 50 |
| Phenanthrene | ND | ug/L | 10 |
| Phenol | ND | ug/L | 10 |
| Pyrene | ND | ug/L | 10 |
| 1,2,4-Trichlorobenzene | ND | ug/L | 10 |
| 2,4,5-Trichlorophenol | ND | ug/L | 50 |
| 2,4,6-Trichlorophenol | ND | ug/L | 10 |
| Surrogate | | | |
| Nitrobenzene-d5 | 90 | % | |
| 2-Fluorobiphenyl | 93 | % | |
| Terphenyl-d14 | 90 | % | |
| Phenol-d5 | 34 | % | |
| 2-Fluorophenol | 51 | % | |
| 2,4,6-Tribromophenol | 63 | % | |

ND = Not detected

NA = Not applicable

Reported By: Chris Jenkins

Approved By: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

I-259

Semivolatile Organics

Library Search

Method 8270

Client Name: Gram, Inc.

Client ID: 02471001

Lab ID: 077541-0004-SA

Matrix: AQUEOUS

Authorized: 08 Sep 94

Sampled: 07 Sep 94 Received: 08 Sep 94

Prepared: 14 Sep 94

Analyzed: 21 Sep 94

There were no tentatively identified compounds discovered for this sample.

ND=Not Detected
NA=Not Applicable

Reported by: Chris Jenkins

Approved by: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

1-260

Method 8270

Client Name: Gram, Inc.
 Client ID: 02481001
 Lab ID: 077541-0005-SA
 Matrix: AQUEOUS
 Authorized: 08 SEP 94

(0.00,0.00,)

Sampled: 07 SEP 94
Prepared: 14 SEP 94Received: 08 SEP 94
Analyzed: 21 SEP 94

| Parameter | Result | Units | Reporting Limit |
|------------------------------|--------|-------|-----------------|
| Acenaphthene | ND | ug/L | 10 |
| Acenaphthylene | ND | ug/L | 10 |
| Anthracene | ND | ug/L | 10 |
| Benzo(a)anthracene | ND | ug/L | 10 |
| Benzo(a)pyrene | ND | ug/L | 10 |
| Benzo(b)fluoranthene | ND | ug/L | 10 |
| 2,2'-Oxybis(1-chloropropane) | ND | ug/L | 10 |
| Benzo(g,h,i)perylene | ND | ug/L | 10 |
| Benzo(k)fluoranthene | ND | ug/L | 10 |
| Benzoic acid | ND | ug/L | 50 |
| Benzyl alcohol | ND | ug/L | 20 |
| 4-Bromophenyl phenyl ether | ND | ug/L | 10 |
| Butyl benzyl phthalate | ND | ug/L | 10 |
| bis(2-Chloroethoxy)-methane | ND | ug/L | 10 |
| bis(2-Chloroethyl) ether | ND | ug/L | 10 |
| 4-Chloro-3-methylphenol | ND | ug/L | 20 |
| 2-Chloronaphthalene | ND | ug/L | 10 |
| 2-Chlorophenol | ND | ug/L | 10 |
| 4-Chloroaniline | ND | ug/L | 20 |
| 4-Chlorophenyl phenyl ether | ND | ug/L | 10 |
| Chrysene | ND | ug/L | 10 |
| Di-n-butyl phthalate | ND | ug/L | 10 |
| Dibenz(a,h)anthracene | ND | ug/L | 10 |
| Dibenzofuran | ND | ug/L | 10 |
| 1,2-Dichlorobenzene | ND | ug/L | 10 |
| 1,3-Dichlorobenzene | ND | ug/L | 10 |
| 1,4-Dichlorobenzene | ND | ug/L | 10 |
| 3,3'-Dichlorobenzidine | ND | ug/L | 20 |
| 2,4-Dichlorophenol | ND | ug/L | 10 |
| Diethyl phthalate | ND | ug/L | 10 |
| 2,4-Dimethylphenol | ND | ug/L | 10 |
| Dimethyl phthalate | ND | ug/L | 10 |
| 4,6-Dinitro-2-methylphenol | ND | ug/L | 50 |
| 2,4-Dinitrophenol | ND | ug/L | 50 |
| 2,4-Dinitrotoluene | ND | ug/L | 10 |
| 2,6-Dinitrotoluene | ND | ug/L | 10 |
| Di-n-octyl phthalate | ND | ug/L | 10 |

(continued on following page)

ND = Not detected
 NA = Not applicable

Reported By: Chris Jenkins

Approved By: Steve Rogers

The cover letter is an integral part of this report.
 Rev 230787

I-261

Semivolatile Organics

Enseco
Former Environmental Service

Method 8270

Client Name: Gram, Inc.
Client ID: 02481001 (0.00,0.00,)
Lab ID: 077541-0005-SA
Matrix: AQUEOUS
Authorized: 08 SEP 94

Sampled: 07 SEP 94
Prepared: 14 SEP 94

Received: 08 SEP 94
Analyzed: 21 SEP 94

| Parameter | Result | Units | Reporting Limit |
|------------------------------|----------|-------|-----------------|
| bis(2-Ethylhexyl)- phthalate | ND | ug/L | 10 |
| Fluoranthene | ND | ug/L | 10 |
| Fluorene | ND | ug/L | 10 |
| Hexachlorobenzene | ND | ug/L | 10 |
| Hexachlorobutadiene | ND | ug/L | 10 |
| Hexachlorocyclopentadiene | ND | ug/L | 10 |
| Hexachloroethane | ND | ug/L | 10 |
| Indeno(1,2,3-cd)pyrene | ND | ug/L | 10 |
| Isophorone | ND | ug/L | 10 |
| 2-Methylnaphthalene | ND | ug/L | 10 |
| 2-Methylphenol | ND | ug/L | 10 |
| 4-Methylphenol | ND | ug/L | 10 |
| Naphthalene | ND | ug/L | 10 |
| 2-Nitroaniline | ND | ug/L | 50 |
| 3-Nitroaniline | ND | ug/L | 50 |
| 4-Nitroaniline | ND | ug/L | 50 |
| Nitrobenzene | ND | ug/L | 10 |
| 2-Nitrophenol | ND | ug/L | 10 |
| 4-Nitrophenol | ND | ug/L | 50 |
| N-Nitrosodiphenylamine | ND | ug/L | 10 |
| N-Nitroso-di- n-propylamine | ND | ug/L | 10 |
| Pentachlorophenol | ND | ug/L | 50 |
| Phenanthrene | ND | ug/L | 10 |
| Phenol | ND | ug/L | 10 |
| Pyrene | ND | ug/L | 10 |
| 1,2,4-Trichlorobenzene | ND | ug/L | 10 |
| 2,4,5-Trichlorophenol | ND | ug/L | 50 |
| 2,4,6-Trichlorophenol | ND | ug/L | 10 |
| Surrogate | Recovery | | |
| Nitrobenzene-d5 | 88 | % | |
| 2-Fluorobiphenyl | 95 | % | |
| Terphenyl-d14 | 90 | % | |
| Phenol-d5 | 36 | % | |
| 2-Fluorophenol | 50 | % | |
| 2,4,6-Tribromophenol | 65 | % | |

ND = Not detected

NA = Not applicable

Reported By: Chris Jenkins

Approved By: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

I - 262

Semivolatile Organics

Library Search

Method 8270

Client Name: Gram, Inc.

Client ID: 02481001

Lab ID: 077541-0005-SA

Matrix: AQUEOUS

Authorized: 08 Sep 94

Sampled: 07 Sep 94 Received: 08 Sep 94

Prepared: 14 Sep 94

Analyzed: 21 Sep 94

ND=Not Detected

NA=Not Applicable

Reported by: Chris Jenkins

Approved by: Steve Rogers

The cover letter is an integral part of this report.
Rev 230787

T-263

QC LOT ASSIGNMENT REPORT
Semivolatile Organics by GC/MS

| Laboratory Sample Number | QC Matrix | QC Category | QC Lot Number (DCS) | QC Run Number (SCS/BLANK) |
|-------------------------------------|------------------|--------------------|--------------------------------|--------------------------------------|
| 077541-0001-SA | AQUEOUS | 8270-IRP-A | 14 SEP 94-11A | 14 SEP 94-11A |
| 077541-0002-SA | AQUEOUS | 8270-IRP-A | 14 SEP 94-11A | 14 SEP 94-11A |
| 077541-0003-SA | AQUEOUS | 8270-IRP-A | 14 SEP 94-11A | 14 SEP 94-11A |
| 077541-0004-SA | AQUEOUS | 8270-IRP-A | 14 SEP 94-11A | 14 SEP 94-11A |
| 077541-0005-SA | AQUEOUS | 8270-IRP-A | 14 SEP 94-11A | 14 SEP 94-11A |

11-16-94

METHOD BLANK REPORT
Semivolatile Organics by GC/MS

| Analyte | Result | Units | Reporting Limit |
|---|--------|-------|-----------------|
| Test: 8270-IRPMS-A | | | |
| Matrix: AQUEOUS | | | |
| QC Lot: 14 SEP 94-11A QC Run: 14 SEP 94-11A | | | |
| Acenaphthene | ND | ug/L | 10 |
| Acenaphthylene | ND | ug/L | 10 |
| Anthracene | ND | ug/L | 10 |
| Benzo(a)anthracene | ND | ug/L | 10 |
| Benzo(a)pyrene | ND | ug/L | 10 |
| Benzo(b)fluoranthene | ND | ug/L | 10 |
| 2,2'-Oxybis(1-chloropropane) | ND | ug/L | 10 |
| Benzo(g,h,i)perylene | ND | ug/L | 10 |
| Benzo(k)fluoranthene | ND | ug/L | 10 |
| Benzoic acid | ND | ug/L | 50 |
| Benzyl alcohol | ND | ug/L | 20 |
| 4-Bromophenyl phenyl ether | ND | ug/L | 10 |
| Butyl benzyl phthalate | ND | ug/L | 10 |
| bis(2-Chloroethoxy)- methane | ND | ug/L | 10 |
| bis(2-Chloroethyl) ether | ND | ug/L | 10 |
| 4-Chloro-3-methylphenol | ND | ug/L | 20 |
| 2-Chloronaphthalene | ND | ug/L | 10 |
| 2-Chlorophenol | ND | ug/L | 10 |
| 4-Chloroaniline | ND | ug/L | 20 |
| 4-Chlorophenyl phenyl ether | ND | ug/L | 10 |
| Chrysene | ND | ug/L | 10 |
| Di-n-butyl phthalate | ND | ug/L | 10 |
| Dibenz(a,h)anthracene | ND | ug/L | 10 |
| Dibenzofuran | ND | ug/L | 10 |
| 1,2-Dichlorobenzene | ND | ug/L | 10 |
| 1,3-Dichlorobenzene | ND | ug/L | 10 |
| 1,4-Dichlorobenzene | ND | ug/L | 10 |
| 3,3'-Dichlorobenzidine | ND | ug/L | 20 |
| 2,4-Dichlorophenol | ND | ug/L | 10 |
| Diethyl phthalate | ND | ug/L | 10 |
| 2,4-Dimethylphenol | ND | ug/L | 10 |
| Dimethyl phthalate | ND | ug/L | 10 |
| 4,6-Dinitro- 2-methylphenol | ND | ug/L | 50 |
| 2,4-Dinitrophenol | ND | ug/L | 50 |
| 2,4-Dinitrotoluene | ND | ug/L | 10 |
| 2,6-Dinitrotoluene | ND | ug/L | 10 |
| Di-n-octyl phthalate | ND | ug/L | 10 |

T - 265

METHOD BLANK REPORT
Semivolatile Organics by GC/MS (cont.)

| Analyte | Result | Units | Reporting Limit |
|---|--------|-------|-----------------|
| Test: 8270-IRPMS-A | | | |
| Matrix: AQUEOUS | | | |
| QC Lot: 14 SEP 94-11A QC Run: 14 SEP 94-11A | | | |
| bis(2-Ethylhexyl)- | | | |
| phthalate | ND | ug/L | 10 |
| Fluoranthene | ND | ug/L | 10 |
| Fluorene | ND | ug/L | 10 |
| Hexachlorobenzene | ND | ug/L | 10 |
| Hexachlorobutadiene | ND | ug/L | 10 |
| Hexachlorocyclopentadiene | ND | ug/L | 10 |
| Hexachloroethane | ND | ug/L | 10 |
| Indeno(1,2,3-cd)pyrene | ND | ug/L | 10 |
| Isophorone | ND | ug/L | 10 |
| 2-Methylnaphthalene | ND | ug/L | 10 |
| 2-Methylphenol | ND | ug/L | 10 |
| 4-Methylphenol | ND | ug/L | 10 |
| Naphthalene | ND | ug/L | 10 |
| 2-Nitroaniline | ND | ug/L | 50 |
| 3-Nitroaniline | ND | ug/L | 50 |
| 4-Nitroaniline | ND | ug/L | 50 |
| Nitrobenzene | ND | ug/L | 10 |
| 2-Nitrophenol | ND | ug/L | 10 |
| 4-Nitrophenol | ND | ug/L | 50 |
| N-Nitrosodiphenylamine | ND | ug/L | 10 |
| N-Nitroso-di- | | | |
| n-propylamine | ND | ug/L | 10 |
| Pentachlorophenol | ND | ug/L | 50 |
| Phenanthrene | ND | ug/L | 10 |
| Phenol | ND | ug/L | 10 |
| Pyrene | ND | ug/L | 10 |
| 1,2,4-Trichlorobenzene | ND | ug/L | 10 |
| 2,4,5-Trichlorophenol | ND | ug/L | 50 |
| 2,4,6-Trichlorophenol | ND | ug/L | 10 |

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LABORATORY CONTROL SAMPLE REPORT
Semivolatile Organics by GC/MS

| Analyte | Concentration Spiked | Concentration Measured | Accuracy(%) LCS | Accuracy(%) Limits |
|---|-------------------------|---------------------------|--------------------|-----------------------|
| Category: 8270-IRP-A Semivolatile Organics (Contain all compounds for IRPMS) | | | | |
| Matrix: AQUEOUS | | | | |
| QC Lot: 14 SEP 94-11A QC Run: 14 SEP 94-11A | | | | |
| Concentration Units: ug/L | | | | |
| Phenol | 200 | 65.5 | 33 | 22-51 |
| bis(2-Chloroethyl) ether | 100 | 93.9 | 94 | 35-110 |
| 2-Chlorophenol | 200 | 169 | 84 | 44-112 |
| 1,3-Dichlorobenzene | 100 | 96.0 | 96 | 6-86 |
| 1,4-Dichlorobenzene | 100 | 95.5 | 96 | 11-87 |
| Benzyl alcohol | 100 | 79.4 | 79 | 36-101 |
| 1,2-Dichlorobenzene | 100 | 96.9 | 97 | 14-90 |
| 2-Methylphenol | 200 | 149 | 74 | 40-117 |
| 2,2'-Oxybis(1-chloropropane) | 100 | 95.8 | 96 | 33-113 |
| 4-Methylphenol | 200 | 137 | 68 | 36-109 |
| N-Nitroso-di-n-propylamine | 100 | 77.9 | 78 | 37-114 |
| Hexachloroethane | 100 | 92.0 | 92 | 0-84 |
| Nitrobenzene | 100 | 93.8 | 94 | 32-114 |
| Isophorone | 100 | 75.8 | 76 | 40-119 |
| 2-Nitrophenol | 200 | 168 | 84 | 40-130 |
| 2,4-Dimethylphenol | 200 | 148 | 74 | 44-122 |
| Benzoic acid | 200 | 78.3 | 39 | 0-72 |
| bis(2-Chloroethoxy)-methane | 100 | 94.3 | 94 | 36-118 |
| 2,4-Dichlorophenol | 200 | 173 | 86 | 40-125 |
| 1,2,4-Trichlorobenzene | 100 | 92.3 | 92 | 10-98 |
| Naphthalene | 100 | 92.7 | 93 | 28-105 |
| 4-Chloroaniline | 100 | 44.7 | 45 | 40-114 |
| Hexachlorobutadiene | 100 | 93.1 | 93 | 0-94 |
| 4-Chloro-3-methylphenol | 200 | 179 | 90 | 22-147 |
| 2-Methylnaphthalene | 100 | 99.0 | 99 | 22-119 |
| Hexachlorocyclopentadiene | 100 | 76.5 | 76 | 0-93 |
| 2,4,6-Trichlorophenol | 200 | 175 | 88 | 44-127 |
| 2,4,5-Trichlorophenol | 200 | 206 | 103 | 46-132 |
| 2-Chloronaphthalene | 100 | 97.6 | 98 | 25-120 |
| 2-Nitroaniline | 100 | 93.2 | 93 | 19-68 |
| Dimethyl phthalate | 100 | 87.4 | 87 | 0-88 |
| Acenaphthylene | 100 | 100 | 100 | 31-117 |
| 2,6-Dinitrotoluene | 100 | 95.5 | 96 | 52-120 |
| 3-Nitroaniline | 100 | 93.7 | 94 | 34-153 |
| Acenaphthene | 100 | 98.6 | 99 | 47-145 |
| 2,4-Dinitrophenol | 200 | 155 | 78 | 17-160 |
| 4-Nitrophenol | 200 | 74.0 | 37 | 16-56 |
| Dibenzofuran | 100 | 100 | 100 | 43-116 |
| 2,4-Dinitrotoluene | 100 | 102 | 102 | 58-121 |
| Diethyl phthalate | 100 | 95.6 | 96 | 0-112 |
| ND - Not Detected | | | | |

Calculations are performed before rounding to avoid round-off errors in calculated results.

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LABORATORY CONTROL SAMPLE REPORT
Semivolatile Organics by GC/MS

(cont.)

| Analyte | Concentration Spiked | Concentration Measured | Accuracy(%) | (cont.) LCS Limits |
|--|-------------------------|---------------------------|-------------|-----------------------|
| Category: 8270-IRP-A Semivolatile Organics | | | | |
| (Contain all compounds for IRPMS) | | | | |
| Matrix: AQUEOUS | | | | |
| QC Lot: 14 SEP 94-11A QC Run: 14 SEP 94-11A | | | | |
| Concentration Units: ug/L | | | | |
| 4-Chlorophenyl phenyl ether | 100 | 98.6 | 99 | 45-116 |
| Fluorene | 100 | 97.4 | 97 | 59-121 |
| 4-Nitroaniline | 100 | 93.6 | 94 | 52-134 |
| 4,6-Dinitro- 2-methylphenol | 200 | 194 | 97 | 45-149 |
| N-Nitrosodiphenylamine | 100 | 102 | 102 | 23-243 |
| 4-Bromophenyl phenyl ether | 100 | 101 | 101 | 46-127 |
| Hexachlorobenzene | 100 | 104 | 104 | 54-126 |
| Pentachlorophenol | 200 | 184 | 92 | 44-142 |
| Phenanthrene | 100 | 101 | 101 | 57-123 |
| Anthracene | 100 | 96.2 | 96 | 59-125 |
| Di-n-butyl phthalate | 100 | 98.6 | 99 | 53-127 |
| Fluoranthene | 100 | 96.7 | 97 | 57-129 |
| Pyrene | 100 | 104 | 104 | 60-130 |
| Butyl benzyl phthalate | 100 | 94.7 | 95 | 52-125 |
| 3,3'-Dichlorobenzidine | 100 | 65.0 | 65 | 42-146 |
| Benzo(a)anthracene | 100 | 100 | 100 | 59-126 |
| Chrysene | 100 | 99.8 | 100 | 59-127 |
| bis(2-Ethylhexyl)- phthalate | 100 | 93.2 | 93 | 57-129 |
| Di-n-octyl phthalate | 100 | 89.1 | 89 | 50-135 |
| Benzo(b)fluoranthene | 100 | 98.2 | 98 | 55-129 |
| Benzo(k)fluoranthene | 100 | 110 | 110 | 55-134 |
| Benzo(a)pyrene | 100 | 98.9 | 99 | 55-130 |
| Indeno(1,2,3-cd)pyrene | 100 | 95.9 | 96 | 64-118 |
| Dibenz(a,h)anthracene | 100 | 97.7 | 98 | 59-121 |
| Benzo(g,h,i)perylene | 100 | 95.7 | 96 | 62-117 |

ND = Not Detected

Calculations are performed before rounding to avoid round-off errors in calculated results.

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SINGLE CONTROL SAMPLE REPORT
Semivolatile Organics by GC/MS

| Analyte | Concentration Spiked | Measured | Accuracy(%) | SCS | Limits |
|---------------------------|-------------------------|----------|-------------|-----|--------|
| Category: 8270-IRP-A | | | | | |
| Matrix: AQUEOUS | | | | | |
| QC Lot: 14 SEP 94-11A | QC Run: 14 SEP 94-11A | | | | |
| Concentration Units: ug/L | | | | | |
| Nitrobenzene-d5 | 100 | 91 | 91 | 18 | -105 |
| 2-Fluorobiphenyl | 100 | 94 | 94 | 21 | -114 |
| Terphenyl-d14 | 100 | 94 | 94 | 45 | -143 |
| Phenol-d5 | 200 | 74 | 37 | 10 | -47 |
| 2-Fluorophenol | 200 | 114 | 57 | 19 | -85 |
| 2,4,6-Tribromophenol | 200 | 145 | 72 | 22 | -117 |

Calculations are performed before rounding to avoid round-off errors in calculated results.

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I-270

METALS

Enseco
Corning Environmental Services

(Water - Total)

Client Name: Gram, Inc.
Client ID: 01661001 (0.00,0.00,)
Lab ID: 077541-0001-SA
Matrix: AQUEOUS
Authorized: 08 SEP 94

Sampled: 07 SEP 94
Prepared: See Below

Received: 08 SEP 94
Analyzed: See Below

| Parameter | Result | Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|------------|--------|-------|-----------------|-------------------|---------------|---------------|
| Aluminum | ND | mg/L | 0.50 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Antimony | ND | mg/L | 0.40 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Arsenic | ND | mg/L | 0.0050 | 7060 | 16 SEP 94 | 19 SEP 94 |
| Barium | ND | mg/L | 0.020 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Beryllium | ND | mg/L | 0.0030 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Cadmium | ND | mg/L | 0.040 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Calcium | 0.84 | mg/L | 0.50 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Chromium | ND | mg/L | 0.070 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Cobalt | ND | mg/L | 0.070 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Copper | ND | mg/L | 0.060 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Iron | 0.40 | mg/L | 0.10 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Lead | ND | mg/L | 0.0050 | 7421 | 16 SEP 94 | 19 SEP 94 |
| Magnesium | ND | mg/L | 0.50 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Manganese | ND | mg/L | 0.020 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Mercury | ND | mg/L | 0.00020 | 7470 | 12 SEP 94 | 12 SEP 94 |
| Molybdenum | ND | mg/L | 0.080 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Nickel | ND | mg/L | 0.15 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Potassium | ND | mg/L | 5.0 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Selenium | ND | mg/L | 0.0050 | 7740 | 16 SEP 94 | 20 SEP 94 |
| Silver | ND | mg/L | 0.070 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Sodium | ND | mg/L | 5.0 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Thallium | ND | mg/L | 0.0022 | 7841 | 16 SEP 94 | 20 SEP 94 |
| Vanadium | ND | mg/L | 0.080 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Zinc | ND | mg/L | 0.020 | 6010 | 13 SEP 94 | 16 SEP 94 |

ND = Not detected

NA = Not applicable

Reported By: Keith Varvell

Approved By: Mei Lai

The cover letter is an integral part of this report.
Rev 230787

T-2071

METALS

Enseco
Corning Environmental Services

(Water - Total)

Client Name: Gram, Inc.
Client ID: 02461001 (0.00,0.00,)
Lab ID: 077541-0002-SA
Matrix: AQUEOUS
Authorized: 08 SEP 94

Sampled: 07 SEP 94
Prepared: See Below

Received: 08 SEP 94
Analyzed: See Below

| Parameter | Result | Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|------------|--------|-------|-----------------|-------------------|---------------|---------------|
| Aluminum | ND | mg/L | 0.50 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Antimony | ND | mg/L | 0.40 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Arsenic | ND | mg/L | 0.0050 | 7060 | 16 SEP 94 | 19 SEP 94 |
| Barium | ND | mg/L | 0.020 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Beryllium | ND | mg/L | 0.0030 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Cadmium | ND | mg/L | 0.040 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Calcium | ND | mg/L | 0.50 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Chromium | ND | mg/L | 0.070 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Cobalt | ND | mg/L | 0.070 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Copper | ND | mg/L | 0.060 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Iron | ND | mg/L | 0.10 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Lead | ND | mg/L | 0.0050 | 7421 | 16 SEP 94 | 19 SEP 94 |
| Magnesium | ND | mg/L | 0.50 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Manganese | ND | mg/L | 0.020 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Mercury | ND | mg/L | 0.00020 | 7470 | 12 SEP 94 | 12 SEP 94 |
| Molybdenum | ND | mg/L | 0.080 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Nickel | ND | mg/L | 0.15 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Potassium | ND | mg/L | 5.0 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Selenium | ND | mg/L | 0.0050 | 7740 | 16 SEP 94 | 20 SEP 94 |
| Silver | ND | mg/L | 0.070 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Sodium | ND | mg/L | 5.0 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Thallium | ND | mg/L | 0.0022 | 7841 | 16 SEP 94 | 20 SEP 94 |
| Vanadium | ND | mg/L | 0.080 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Zinc | ND | mg/L | 0.020 | 6010 | 13 SEP 94 | 16 SEP 94 |

ND = Not detected
NA = Not applicable

Reported By: Keith Varvell

Approved By: Mei Lai

The cover letter is an integral part of this report.
Rev 230787

I-272

(Water - Total)

Client Name: Gram, Inc.
 Client ID: 02462001 (0.00,0.00,)
 Lab ID: 077541-0003-SA
 Matrix: AQUEOUS
 Authorized: 08 SEP 94

Sampled: 07 SEP 94
 Prepared: See Below

Received: 08 SEP 94
 Analyzed: See Below

| Parameter | Result | Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|------------|--------|-------|-----------------|-------------------|---------------|---------------|
| Aluminum | ND | mg/L | 0.50 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Antimony | ND | mg/L | 0.40 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Arsenic | ND | mg/L | 0.0050 | 7060 | 16 SEP 94 | 19 SEP 94 |
| Barium | ND | mg/L | 0.020 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Beryllium | ND | mg/L | 0.0030 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Cadmium | ND | mg/L | 0.040 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Calcium | ND | mg/L | 0.50 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Chromium | ND | mg/L | 0.070 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Cobalt | ND | mg/L | 0.070 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Copper | ND | mg/L | 0.060 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Iron | ND | mg/L | 0.10 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Lead | ND | mg/L | 0.0050 | 7421 | 16 SEP 94 | 19 SEP 94 |
| Magnesium | ND | mg/L | 0.50 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Manganese | ND | mg/L | 0.020 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Mercury | ND | mg/L | 0.00020 | 7470 | 12 SEP 94 | 12 SEP 94 |
| Molybdenum | ND | mg/L | 0.080 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Nickel | ND | mg/L | 0.15 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Potassium | ND | mg/L | 5.0 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Selenium | ND | mg/L | 0.0050 | 7740 | 16 SEP 94 | 20 SEP 94 |
| Silver | ND | mg/L | 0.070 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Sodium | ND | mg/L | 5.0 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Thallium | ND | mg/L | 0.0022 | 7841 | 16 SEP 94 | 20 SEP 94 |
| Vanadium | ND | mg/L | 0.080 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Zinc | ND | mg/L | 0.020 | 6010 | 13 SEP 94 | 16 SEP 94 |

ND = Not detected

NA = Not applicable

Reported By: Keith Varvell

Approved By: Mei Lai

The cover letter is an integral part of this report.
 Rev 230787

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METALSEnseco
Corning Environmental Services

(Water - Total)

Client Name: Gram, Inc.
Client ID: 02471001 (0.00,0.00,)
Lab ID: 077541-0004-SA
Matrix: AQUEOUS
Authorized: 08 SEP 94

Sampled: 07 SEP 94
Prepared: See Below

Received: 08 SEP 94
Analyzed: See Below

| Parameter | Result | Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|------------|--------|-------|-----------------|-------------------|---------------|---------------|
| Aluminum | ND | mg/L | 0.50 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Antimony | ND | mg/L | 0.40 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Arsenic | ND | mg/L | 0.0050 | 7060 | 16 SEP 94 | 19 SEP 94 |
| Barium | ND | mg/L | 0.020 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Beryllium | ND | mg/L | 0.0030 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Cadmium | ND | mg/L | 0.040 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Calcium | ND | mg/L | 0.50 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Chromium | ND | mg/L | 0.070 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Cobalt | ND | mg/L | 0.070 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Copper | ND | mg/L | 0.060 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Iron | ND | mg/L | 0.10 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Lead | ND | mg/L | 0.0050 | 7421 | 16 SEP 94 | 19 SEP 94 |
| Magnesium | ND | mg/L | 0.50 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Manganese | ND | mg/L | 0.020 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Mercury | ND | mg/L | 0.00020 | 7470 | 12 SEP 94 | 12 SEP 94 |
| Molybdenum | ND | mg/L | 0.080 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Nickel | ND | mg/L | 0.15 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Potassium | ND | mg/L | 5.0 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Selenium | ND | mg/L | 0.0050 | 7740 | 16 SEP 94 | 20 SEP 94 |
| Silver | ND | mg/L | 0.070 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Sodium | ND | mg/L | 5.0 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Thallium | ND | mg/L | 0.0022 | 7841 | 16 SEP 94 | 20 SEP 94 |
| Vanadium | ND | mg/L | 0.080 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Zinc | ND | mg/L | 0.020 | 6010 | 13 SEP 94 | 16 SEP 94 |

ND = Not detected

NA = Not applicable

Reported By: Keith Varvell

Approved By: Mei Lai

The cover letter is an integral part of this report.
Rev 230787

T-574

METALS

Enseco
Corning Environmental Services

(Water - Total)

Client Name: Gram, Inc.
Client ID: 02481001
Lab ID: 077541-0005-SA
Matrix: AQUEOUS
Authorized: 08 SEP 94

(0.00,0.00,)

Sampled: 07 SEP 94
Prepared: See Below

Received: 08 SEP 94
Analyzed: See Below

| Parameter | Result | Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|------------|--------|-------|-----------------|-------------------|---------------|---------------|
| Aluminum | ND | mg/L | 0.50 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Antimony | ND | mg/L | 0.40 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Arsenic | ND | mg/L | 0.0050 | 7060 | 16 SEP 94 | 19 SEP 94 |
| Barium | ND | mg/L | 0.020 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Beryllium | ND | mg/L | 0.0030 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Cadmium | ND | mg/L | 0.040 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Calcium | ND | mg/L | 0.50 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Chromium | ND | mg/L | 0.070 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Cobalt | ND | mg/L | 0.070 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Copper | ND | mg/L | 0.060 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Iron | ND | mg/L | 0.10 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Lead | ND | mg/L | 0.0050 | 7421 | 16 SEP 94 | 19 SEP 94 |
| Magnesium | ND | mg/L | 0.50 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Manganese | ND | mg/L | 0.020 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Mercury | ND | mg/L | 0.00020 | 7470 | 12 SEP 94 | 12 SEP 94 |
| Molybdenum | ND | mg/L | 0.080 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Nickel | ND | mg/L | 0.15 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Potassium | ND | mg/L | 5.0 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Selenium | ND | mg/L | 0.0050 | 7740 | 16 SEP 94 | 20 SEP 94 |
| Silver | ND | mg/L | 0.070 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Sodium | ND | mg/L | 5.0 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Thallium | ND | mg/L | 0.0022 | 7841 | 16 SEP 94 | 20 SEP 94 |
| Vanadium | ND | mg/L | 0.080 | 6010 | 13 SEP 94 | 16 SEP 94 |
| Zinc | ND | mg/L | 0.020 | 6010 | 13 SEP 94 | 16 SEP 94 |

ND = Not detected

NA = Not applicable

Reported By: Keith Varvell

Approved By: Mei Lai

The cover letter is an integral part of this report.
Rev 230787

I-275

QC LOT ASSIGNMENT REPORT
Metals Analysis and Preparation

| Laboratory Sample Number | QC Matrix | QC Category | QC Lot Number (DCS) | QC Run Number (SCS/BLANK) |
|--------------------------|-----------|-------------|---------------------|---------------------------|
| 077541-0001-SA | AQUEOUS | ICP-AT | 13 SEP 94-U | 13 SEP 94-U |
| 077541-0001-SA | AQUEOUS | 7470-IRPAT | 12 SEP 94-BX | 12 SEP 94-BX |
| 077541-0001-SA | AQUEOUS | AS-OBG-AT | 16 SEP 94-U | 16 SEP 94-U |
| 077541-0001-SA | AQUEOUS | 7421-IRPAT | 16 SEP 94-U | 16 SEP 94-U |
| 077541-0001-SA | AQUEOUS | 7740-IRPAT | 16 SEP 94-U | 16 SEP 94-U |
| 077541-0001-SA | AQUEOUS | 7841-IRPAT | 16 SEP 94-U | 16 SEP 94-U |
| 077541-0002-SA | AQUEOUS | ICP-AT | 13 SEP 94-U | 13 SEP 94-U |
| 077541-0002-SA | AQUEOUS | 7470-IRPAT | 12 SEP 94-BX | 12 SEP 94-BX |
| 077541-0002-SA | AQUEOUS | AS-OBG-AT | 16 SEP 94-U | 16 SEP 94-U |
| 077541-0002-SA | AQUEOUS | 7421-IRPAT | 16 SEP 94-U | 16 SEP 94-U |
| 077541-0002-SA | AQUEOUS | 7740-IRPAT | 16 SEP 94-U | 16 SEP 94-U |
| 077541-0002-SA | AQUEOUS | 7841-IRPAT | 16 SEP 94-U | 16 SEP 94-U |
| 077541-0003-SA | AQUEOUS | ICP-AT | 13 SEP 94-U | 13 SEP 94-U |
| 077541-0003-SA | AQUEOUS | 7470-IRPAT | 12 SEP 94-BX | 12 SEP 94-BX |
| 077541-0003-SA | AQUEOUS | AS-OBG-AT | 16 SEP 94-U | 16 SEP 94-U |
| 077541-0003-SA | AQUEOUS | 7421-IRPAT | 16 SEP 94-U | 16 SEP 94-U |
| 077541-0003-SA | AQUEOUS | 7740-IRPAT | 16 SEP 94-U | 16 SEP 94-U |
| 077541-0003-SA | AQUEOUS | 7841-IRPAT | 16 SEP 94-U | 16 SEP 94-U |
| 077541-0004-SA | AQUEOUS | ICP-AT | 13 SEP 94-U | 13 SEP 94-U |
| 077541-0004-SA | AQUEOUS | 7470-IRPAT | 12 SEP 94-BX | 12 SEP 94-BX |
| 077541-0004-SA | AQUEOUS | AS-OBG-AT | 16 SEP 94-U | 16 SEP 94-U |
| 077541-0004-SA | AQUEOUS | 7421-IRPAT | 16 SEP 94-U | 16 SEP 94-U |
| 077541-0004-SA | AQUEOUS | 7740-IRPAT | 16 SEP 94-U | 16 SEP 94-U |
| 077541-0004-SA | AQUEOUS | 7841-IRPAT | 16 SEP 94-U | 16 SEP 94-U |
| 077541-0005-SA | AQUEOUS | ICP-AT | 13 SEP 94-U | 13 SEP 94-U |
| 077541-0005-SA | AQUEOUS | 7470-IRPAT | 12 SEP 94-BX | 12 SEP 94-BX |
| 077541-0005-SA | AQUEOUS | AS-OBG-AT | 16 SEP 94-U | 16 SEP 94-U |
| 077541-0005-SA | AQUEOUS | 7421-IRPAT | 16 SEP 94-U | 16 SEP 94-U |
| 077541-0005-SA | AQUEOUS | 7740-IRPAT | 16 SEP 94-U | 16 SEP 94-U |
| 077541-0005-SA | AQUEOUS | 7841-IRPAT | 16 SEP 94-U | 16 SEP 94-U |

IE-876

METHOD BLANK REPORT
Metals Analysis and Preparation

| Analyte | Result | Units | Reporting Limit |
|---------------------|---------------------|-------|-----------------|
| Test: ICP-IRPMS-AT | | | |
| Matrix: AQUEOUS | | | |
| QC Lot: 13 SEP 94-U | QC Run: 13 SEP 94-U | | |
| Aluminum | ND | mg/L | 0.50 |
| Antimony | ND | mg/L | 0.40 |
| Barium | ND | mg/L | 0.020 |
| Beryllium | ND | mg/L | 0.0030 |
| Cadmium | ND | mg/L | 0.040 |
| Calcium | ND | mg/L | 0.50 |
| Chromium | ND | mg/L | 0.070 |
| Cobalt | ND | mg/L | 0.070 |
| Copper | ND | mg/L | 0.060 |
| Iron | ND | mg/L | 0.10 |
| Magnesium | ND | mg/L | 0.50 |
| Manganese | ND | mg/L | 0.020 |
| Molybdenum | ND | mg/L | 0.080 |
| Nickel | ND | mg/L | 0.15 |
| Potassium | ND | mg/L | 5.0 |
| Silver | ND | mg/L | 0.070 |
| Sodium | ND | mg/L | 5.0 |
| Vanadium | ND | mg/L | 0.080 |
| Zinc | ND | mg/L | 0.020 |

Test: HG-CVAA-COE-AT
Matrix: AQUEOUS
QC Lot: 12 SEP 94-BX QC Run: 12 SEP 94-BX

| | | | |
|---------|----|------|---------|
| Mercury | ND | mg/L | 0.00020 |
|---------|----|------|---------|

Test: AS-FAA-GAFB-IRPMS-AT
Matrix: AQUEOUS
QC Lot: 16 SEP 94-U QC Run: 16 SEP 94-U

| | | | |
|---------|----|------|--------|
| Arsenic | ND | mg/L | 0.0050 |
|---------|----|------|--------|

I-277

METHOD BLANK REPORT
Metals Analysis and Preparation (cont.)

| Analyte | Result | Units | Reporting Limit |
|--|--------|-------|-----------------|
| Test: PB-FAA-GAFB-IRPMS-AT Matrix: AQUEOUS QC Lot: 16 SEP 94-U QC Run: 16 SEP 94-U | ND | mg/L | 0.0050 |
| Lead | ND | mg/L | 0.0050 |
| Test: SE-FAA-GAFB-IRPMS-AT Matrix: AQUEOUS QC Lot: 16 SEP 94-U QC Run: 16 SEP 94-U | ND | mg/L | 0.0050 |
| Selenium | ND | mg/L | 0.0050 |
| Test: TL-FAA-GAFB-IRPMS-AT Matrix: AQUEOUS QC Lot: 16 SEP 94-U QC Run: 16 SEP 94-U | ND | mg/L | 0.0022 |
| Thallium | ND | mg/L | 0.0022 |

T-278

METHOD BLANK REPORT
Metals Analysis and Preparation
Project: 077541

Test: ICP-IRPMS-AT ICP Quantitative Scan (27 Total Metals)
Matrix: AQUEOUS
QC Lot: 13 SEP 94-U QC Run: 13 SEP 94-U

| Analyte | Result | Units | Reporting Limit |
|------------|--------|-------|-----------------|
| Aluminum | ND | mg/L | 0.50 |
| Antimony | ND | mg/L | 0.40 |
| Barium | ND | mg/L | 0.020 |
| Beryllium | ND | mg/L | 0.0030 |
| Cadmium | ND | mg/L | 0.040 |
| Calcium | ND | mg/L | 0.50 |
| Chromium | ND | mg/L | 0.070 |
| Cobalt | ND | mg/L | 0.070 |
| Copper | ND | mg/L | 0.060 |
| Iron | ND | mg/L | 0.10 |
| Magnesium | ND | mg/L | 0.50 |
| Manganese | ND | mg/L | 0.020 |
| Molybdenum | ND | mg/L | 0.080 |
| Nickel | ND | mg/L | 0.15 |
| Potassium | ND | mg/L | 5.0 |
| Silver | ND | mg/L | 0.070 |
| Sodium | ND | mg/L | 5.0 |
| Vanadium | ND | mg/L | 0.080 |
| Zinc | ND | mg/L | 0.020 |

Test: HG-CVAA-COE-AT Mercury, Cold Vapor AA (Total)
Matrix: AQUEOUS
QC Lot: 12 SEP 94-BX QC Run: 12 SEP 94-BX

| Analyte | Result | Units | Reporting Limit |
|---------|--------|-------|-----------------|
| Mercury | ND | mg/L | 0.00020 |

Test: AS-FAA-GAFB-IRPMS-AT Arsenic, Furnace AA (Total)
Matrix: AQUEOUS
QC Lot: 16 SEP 94-U QC Run: 16 SEP 94-U

| Analyte | Result | Units | Reporting Limit |
|---------|--------|-------|-----------------|
| Arsenic | ND | mg/L | 0.0050 |

ND = Not Detected

5-279

METHOD BLANK REPORT
Metals Analysis and Preparation
Project: 077541

Test: PB-FAA-GAFB-IRPMS-AT Lead, Furnace AA
Matrix: AQUEOUS
QC Lot: 16 SEP 94-U QC Run: 16 SEP 94-U

| Analyte | Result | Units | Reporting Limit |
|---------|--------|-------|-----------------|
| Lead | ND | mg/L | 0.0050 |

Test: SE-FAA-GAFB-IRPMS-AT Selenium, Furnace AA (Total)

Matrix: AQUEOUS
QC Lot: 16 SEP 94-U QC Run: 16 SEP 94-U

| Analyte | Result | Units | Reporting Limit |
|----------|--------|-------|-----------------|
| Selenium | ND | mg/L | 0.0050 |

Test: TL-FAA-GAFB-IRPMS-AT Thallium, Furnace AA (Total)

Matrix: AQUEOUS
QC Lot: 16 SEP 94-U QC Run: 16 SEP 94-U

| Analyte | Result | Units | Reporting Limit |
|----------|--------|-------|-----------------|
| Thallium | ND | mg/L | 0.0022 |

ND = Not Detected

I-280

LABORATORY CONTROL SAMPLE REPORT
Metals Analysis and Preparation

| Analyte | Concentration Spiked | Concentration Measured | Accuracy(%) LCS | Accuracy(%) Limits |
|---------------------------|-------------------------|---------------------------|--------------------|-----------------------|
| Category: ICP-AT | ICP Metals | | | |
| Matrix: AQUEOUS | | | | |
| QC Lot: 13 SEP 94-U | QC Run: 13 SEP 94-U | | | |
| Concentration Units: mg/L | | | | |
| Aluminum | 2.00 | 2.04 | 102 | 80-120 |
| Antimony | 0.500 | 0.494 | 99 | 80-120 |
| Arsenic | 0.500 | 0.495 | 99 | 80-120 |
| Barium | 2.00 | 2.06 | 103 | 80-120 |
| Beryllium | 0.0500 | 0.0522 | 104 | 80-120 |
| Boron | 1.00 | 1.01 | 101 | 80-120 |
| Cadmium | 0.0500 | 0.0476 | 95 | 80-120 |
| Calcium | 100 | 100 | 100 | 80-120 |
| Chromium | 0.200 | 0.201 | 101 | 80-120 |
| Cobalt | 0.500 | 0.497 | 99 | 80-120 |
| Copper | 0.250 | 0.254 | 102 | 80-120 |
| Iron | 1.00 | 1.01 | 101 | 80-120 |
| Lead | 0.500 | 0.512 | 102 | 80-120 |
| Lithium | 0.200 | 0.203 | 101 | 80-120 |
| Magnesium | 50.0 | 49.7 | 99 | 80-120 |
| Manganese | 0.500 | 0.502 | 100 | 80-120 |
| Molybdenum | 0.200 | 0.203 | 101 | 80-120 |
| Nickel | 0.500 | 0.534 | 107 | 80-120 |
| Potassium | 50.0 | 48.6 | 97 | 80-120 |
| Selenium | 2.00 | 2.03 | 101 | 80-120 |
| Silver | 0.0500 | 0.0469 | 94 | 80-120 |
| Sodium | 100 | 103 | 103 | 80-120 |
| Thallium | 2.00 | 2.03 | 102 | 80-120 |
| Tin | 4.00 | 3.92 | 98 | 80-120 |
| Titanium | 2.00 | 2.01 | 101 | 80-120 |
| Vanadium | 0.500 | 0.503 | 101 | 80-120 |
| Zinc | 0.500 | 0.495 | 99 | 80-120 |

| Analyte | Concentration Spiked | Concentration Measured | Accuracy(%) LCS | Accuracy(%) Limits |
|--------------------------------------|----------------------------------|---------------------------|--------------------|-----------------------|
| Category: 7470-IRPAT Mercury by CVAA | | | | |
| Matrix: AQUEOUS | STATIC QC LIMITS - DO NOT UPDATE | | | |
| QC Lot: 12 SEP 94-BX | QC Run: 12 SEP 94-BX | | | |
| Concentration Units: mg/L | | | | |
| Mercury | 0.00100 | 0.00103 | 103 | 80-120 |

ND = Not Detected

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE REPORT
Metals Analysis and Preparation

(cont.)

| Analyte | Concentration Spiked | Measured | Accuracy(%) LCS | Limits |
|---|-------------------------|----------|--------------------|--------|
| Category: AS-OBG-AT Arsenic, Furnace AA | | | | |
| Matrix: AQUEOUS | | | | |
| QC Lot: 16 SEP 94-U | QC Run: 16 SEP 94-U | | | |
| Concentration Units: mg/L | | | | |
| Arsenic | 0.0400 | 0.0449 | 112 | 80-120 |
| Analyte | Concentration Spiked | Measured | Accuracy(%) LCS | Limits |
| Category: 7421-IRPAT Lead, Furnace AA (Total) | | | | |
| Matrix: AQUEOUS | | | | |
| QC Lot: 16 SEP 94-U | QC Run: 16 SEP 94-U | | | |
| Concentration Units: mg/L | | | | |
| Lead | 0.0200 | 0.0223 | 111 | 83-113 |
| Analyte | Concentration Spiked | Measured | Accuracy(%) LCS | Limits |
| Category: 7740-IRPAT Selenium, Furnace AA | | | | |
| Matrix: AQUEOUS | | | | |
| QC Lot: 16 SEP 94-U | QC Run: 16 SEP 94-U | | | |
| Concentration Units: mg/L | | | | |
| Selenium | 0.0200 | 0.0219 | 110 | 80-120 |
| Analyte | Concentration Spiked | Measured | Accuracy(%) LCS | Limits |
| Category: 7841-IRPAT Thallium, Furnace AA | | | | |
| Matrix: AQUEOUS | | | | |
| QC Lot: 16 SEP 94-U | QC Run: 16 SEP 94-U | | | |
| Concentration Units: mg/L | | | | |
| Thallium | 0.0500 | 0.0500 | 100 | 80-120 |

ND = Not Detected

Calculations are performed before rounding to avoid round-off errors in calculated results.

I-282

GENERAL INORGANICS

Enseco
Corning Environmental Services

(Water)

Client Name: Gram, Inc.
Client ID: 01661001
Lab ID: 077541-0001-SA
Matrix: AQUEOUS
Authorized: 08 SEP 94

(0.00,0.00,)

Sampled: 07 SEP 94
Prepared: See BelowReceived: 08 SEP 94
Analyzed: See Below

| Parameter | Result | Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|-----------------------------|--------|-------|-----------------|-------------------|---------------|---------------|
| Cyanide, Total | ND | mg/L | 0.010 | 9012 Modified | 13 SEP 94 | 14 SEP 94 |
| Nitrate + Nitrite (as N) | ND | mg/L | 0.050 | 353.2 | NA | 09 SEP 94 |

ND = Not detected

NA = Not applicable

Reported By: Lori Ann Upton

Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.
Rev 230787

I-283

GENERAL INORGANICS**Enseco**
*Corning Environmental Services***(Water)****Client Name:** Gram, Inc.**Client ID:** 02461001

(0.00,0.00,)

Lab ID: 077541-0002-SA**Matrix:** AQUEOUS**Authorized:** 08 SEP 94**Sampled:** 07 SEP 94**Prepared:** See Below**Received:** 08 SEP 94**Analyzed:** See Below

| Parameter | Result | Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|---|--------|-------|-----------------|-------------------|---------------|---------------|
| Cyanide, Total Nitrate + Nitrite (as N) | ND | mg/L | 0.010 | 9012 Modified | 13 SEP 94 | 14 SEP 94 |
| | ND | mg/L | 0.050 | 353.2 | NA | 09 SEP 94 |

ND = Not detected

NA = Not applicable

Reported By: Lori Ann Upton

Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.
Rev 230787

J-284

GENERAL INORGANICS

Enseco
Corning Environmental Services

(Water)

Client Name: Gram, Inc.
Client ID: 02462001 (0.00,0.00,)
Lab ID: 077541-0003-SA
Matrix: AQUEOUS
Authorized: 08 SEP 94

Sampled: 07 SEP 94
Prepared: See Below

Received: 08 SEP 94
Analyzed: See Below

| Parameter | Result | Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|---|--------|-------|-----------------|-------------------|---------------|---------------|
| Cyanide, Total Nitrate + Nitrite (as N) | ND | mg/L | 0.010 | 9012 Modified | 13 SEP 94 | 14 SEP 94 |
| | ND | mg/L | 0.050 | 353.2 | NA | 09 SEP 94 |

ND = Not detected
NA = Not applicable

Reported By: Lori Ann Upton

Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.
Rev 230787

J-285

GENERAL INORGANICS**Enseco**
*Corning Environmental Services***(Water)**

Client Name: Gram, Inc.
Client ID: 02471001 (0.00,0.00,)
Lab ID: 077541-0004-SA
Matrix: AQUEOUS
Authorized: 08 SEP 94

Sampled: 07 SEP 94 Received: 08 SEP 94
Prepared: See Below Analyzed: See Below

| Parameter | Result | Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|---|--------|-------|-----------------|-------------------|---------------|---------------|
| Cyanide, Total Nitrate + Nitrite (as N) | ND | mg/L | 0.010 | 9012 Modified | 13 SEP 94 | 14 SEP 94 |
| | ND | mg/L | 0.050 | 353.2 | NA | 09 SEP 94 |

ND = Not detected
NA = Not applicable

Reported By: Lori Ann Upton

Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.
Rev 230787

I-286

GENERAL INORGANICS

Enseco
Corning Environmental Services

(Water)

Client Name: Gram, Inc.
Client ID: 02481001 (0.00,0.00,)
Lab ID: 077541-0005-SA
Matrix: AQUEOUS
Authorized: 08 SEP 94

Sampled: 07 SEP 94 Received: 08 SEP 94
Prepared: See Below Analyzed: See Below

| Parameter | Result | Units | Reporting Limit | Analytical Method | Prepared Date | Analyzed Date |
|-----------------------------|--------|-------|-----------------|-------------------|---------------|---------------|
| Cyanide, Total | ND | mg/L | 0.010 | 9012 Modified | 13 SEP 94 | 14 SEP 94 |
| Nitrate + Nitrite (as N) | ND | mg/L | 0.050 | 353.2 | NA | 09 SEP 94 |

ND = Not detected
NA = Not applicable

Reported By: Lori Ann Upton

Approved By: Jennifer Kimzey

The cover letter is an integral part of this report.
Rev 230787

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QC LOT ASSIGNMENT REPORT
Wet Chemistry Analysis and Preparation

| Laboratory Sample Number | QC Matrix | QC Category | QC Lot Number (DCS) | QC Run Number (SCS/BLANK) |
|--------------------------|-----------|-------------|---------------------|---------------------------|
| 077541-0001-SA | AQUEOUS | NO3&NO2-A | 09 SEP 94-A | 09 SEP 94-A |
| 077541-0001-SA | AQUEOUS | CN-A | 13 SEP 94-L | 13 SEP 94-L |
| 077541-0002-SA | AQUEOUS | NO3&NO2-A | 09 SEP 94-A | 09 SEP 94-A |
| 077541-0002-SA | AQUEOUS | CN-A | 13 SEP 94-L | 13 SEP 94-L |
| 077541-0003-SA | AQUEOUS | NO3&NO2-A | 09 SEP 94-A | 09 SEP 94-A |
| 077541-0003-SA | AQUEOUS | CN-A | 13 SEP 94-L | 13 SEP 94-L |
| 077541-0004-SA | AQUEOUS | NO3&NO2-A | 09 SEP 94-A | 09 SEP 94-A |
| 077541-0004-SA | AQUEOUS | CN-A | 13 SEP 94-L | 13 SEP 94-L |
| 077541-0005-SA | AQUEOUS | NO3&NO2-A | 09 SEP 94-A | 09 SEP 94-A |
| 077541-0005-SA | AQUEOUS | CN-A | 13 SEP 94-L | 13 SEP 94-L |

I-288

METHOD BLANK REPORT

Wet Chemistry Analysis and Preparation

| Analyte | Result | Units | Reporting Limit |
|---|--------|-------|-----------------|
| Test: NO ₃ +NO ₂ -A Matrix: AQUEOUS QC Lot: 09 SEP 94-A QC Run: 09 SEP 94-A | | | |
| Nitrate + Nitrite (as N) | ND | mg/L | 0.050 |
| Test: CN-9012-AT Matrix: AQUEOUS QC Lot: 13 SEP 94-L QC Run: 13 SEP 94-L | | | |
| Cyanide, Total | ND | mg/L | 0.010 |

1-289

LABORATORY CONTROL SAMPLE REPORT
Wet Chemistry Analysis and Preparation

| Analyte | Concentration Spiked | Concentration Measured | Accuracy(%) LCS | Limits |
|---|-------------------------|---------------------------|--------------------|--------|
| Category: NO3&NO2-A Nitrate plus nitrite Matrix: AQUEOUS QC Lot: 09 SEP 94-A QC Run: 09 SEP 94-A Concentration Units: mg/L | | | | |
| Nitrate + Nitrite (as N) | 0.500 | 0.489 | 98 | 90-110 |
| Analyte | Concentration Spiked | Concentration Measured | Accuracy(%) LCS | Limits |
| Category: CN-A Cyanide Matrix: AQUEOUS QC Lot: 13 SEP 94-L QC Run: 13 SEP 94-L Concentration Units: mg/L | | | | |
| Cyanide, Total | 0.100 | 0.0900 | 90 | 73-111 |

ND = Not Detected

Calculations are performed before rounding to avoid round-off errors in calculated results.

I-690